Behavioural Finance & Corporate Investment: M&A Success, Pre-Merger Issuance and the Media

BLACK, EMMA,LOUISE

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A Thesis presented for the degree of Doctor of Philosophy

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Abstract

Classical economics proposed that individuals are rational beings that undertake essential due diligence when making a financial decision so as to reduce avoidable risk when investing. Despite the intuition behind such a conclusion, it has become widely recognised that investors are driven by *animal spirits*. These emotions can influence an investment decision and lead to a less than optimal outcome. This thesis includes three empirical chapters, which provide compelling evidence on the importance of behavioural finance in Mergers and Acquisitions. The results herein have practical relevance for academics, practitioners and regulators alike.

The prevailing literature has focussed on corporate finance decisions under the assumption of universal rationality. Moreover most empirical research to-date has focussed on the US market, and yet the UK offers attractive characteristics worthy of future research. Firstly, most M&As (circa 80.2%) within the UK are financed using cash. Secondly, a large majority (circa 91%) of UK targets are unlisted companies. Finally, the UK remains the second-most active M&A market outside of the US. This chapter offers research in pursuit of understanding the UK market deeper, while simultaneously assessing the value of established findings in different settings.

In this pursuit, the first empirical chapter of this thesis relaxes universal rationality, modelling inefficiency at a firm and market level. Temporary deviations away from fundamental values can lead managers to attempt to *time* capital markets both in the decision to merge and in the choice over the payment method to be used. Using an intuitive methodological approach, the empirical results in Chapter Three indicate that market-timing using overvalued equity is not supported in the UK with evidence contrasting established US findings. The results suggest that undervaluation however is a stronger motive for merger activity as shareholders benefit twofold from the revaluation of the firm as well as the addition of the target's assets.

An additional weakness of previous literature lies in the failure to interact various corporate decisions together. Chapter Four combines capital structure changes with the effects on an acquirer's abnormal return. The choice between debt and equity can give the market an indication over the beliefs of the managerial team regarding the firm's future cash flows. The decision to issue equity can signal overvaluation while issuing debt can exert an external monitoring mechanism on managerial teams leading to better corporate investments. Chapter Four supports the view of debt as a disciplinary mechanism with significantly lower losses experienced by acquirers that issue debt in the three years before announcing a M&A.

The final empirical chapter of this thesis takes note of the power of mass media to influence an investor's decision-making process. In an attempt to undertake in-depth due diligence, individuals can utilise prestigious mass media to help decide which firms to invest within, while the mass media can also reflect public opinion of the firm. Chapter Five indicates that acquirers that are covered in the media, and thus are placed in investor's minds, earn significantly better returns long-term than those that are not in the media. The results indicate that it is the coverage rather than the attitude of the media that influences an acquirer's stock price. This finding supports the view that any publicity is good publicity.

Overall, this thesis provides valuable evidence that challenges the assumption of universal rationality. It is recommended that if we wish to understand financial markets better, then we must seek to understand the people that make decisions within them.

Declaration

No part of this thesis has been submitted elsewhere for any other degree or qualification in this or any other university. It is all my own work unless referenced to the contrary in the text.

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Emma Black
23rd September 2013

Dedication

Our past - Harry, Ann and Joan.

Our future - Trystan, Brandon, Dylan, Harry and Heidi.

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"Markets are nothing more than a reflection of people's emotions. They are actually a collective noun for the hopes, dreams, fears – all the emotions of related market participants. What you and I might call 'volatility' is nothing more than the outcome of different pools of emotion fighting against each other for supremacy".

Bob Swarup (2013)

CHAPTER ONE: INTRODUCTION

1. Introduction

"Since we know that there are indeed humans involved in financial markets, are the markets any different because of their presence? Would the financial world be materially different if investors, traders, managers, and workers were all replaced by computer programs? The chapters in this (thesis) suggest that the answer is yes. People make a difference."

Richard H. Thaler (1993: xv)

From the geopolitical international landscape to the micromanagement of change, M&A's fundamentally alter the future path of an organisation. History has provided us with countless examples of marriages made in heaven, such as the Disney-Pixar combination and divorces resulting in hell. Corporate divorces have been touted as leading to wealth destruction on a massive scale (Moeller, Schlingemann and Stulz, 2005), with the AOL-Time Warner deal most probably being the most famous case to date. There have not yet been definitive indications over truly why M&A's create value and why they don't, despite a number of proven determinants. Indeed a large portion of the existing literature does in fact indicate statistically and economically significant losses for the majority of acquirers long-term.

So why do firms decide to initiate a M&A? Classical economics proposes that individuals are rational beings who undertake careful due diligence when making investment decisions. Adam Smith in his seminal work *The Wealth of Nations* (1774) reasoned that we all have an incentive to unearth as much information as possible before undertaking an investment for otherwise we incur additional risk that we otherwise could have avoided. Regardless of macro or microeconomic situations, this incentive remains.

Under this trail of thought, Eugene Fama gave birth to the Efficient Markets Hypothesis in 1965, with later modifications in 1970. This hypothesis has formed the foundation block for most empirical explorations in the financial world. Fama reiterated the musings of Smith to model market participants as efficient players in a rational world. Efficient markets were defined as those in which stock prices react instantaneously to the arrival of new information entering the market, of which there are three forms. Weak-form markets should offer no profitable opportunities for the exploitation of past information; Semi-strong form markets should offer no profitable opportunities from past or current public information, which should all have been incorporated into stock prices; and, finally, strong-form markets should see stock prices reflecting all past, public and private information. If there are ever situations in which stock prices do not incorporate this information such that profitable opportunities do exist, then arbitrageurs should exploit this opportunity pushing prices back towards efficiency. This idea of market efficiency is central to the notion of the random walk of stock prices. If markets are efficient then stock prices should only adjust on the basis of new information arrivals. This new information cannot be predicted and hence there should be a random evolution of prices over time.

Whether individuals are or are not rational decision-makers has been a long-debated question. John Maynard Keynes in 1936 spoke about *animal spirits*, introducing the idea that individuals may not seek to undertake the eulogised due diligence as promoted by Adam Smith, and in fact may be influenced in their decision making by their emotions rather than by their intellectual assessments. Keynes argued that an individual has no ability to forecast the future evolution of stock prices, and yet makes an investment decision on an expectation over what they are most likely to do. This expectation gives way to emotional heuristics in the decision-making process, whereby personal biases can infect the decision.

The development of cognitive and behavioural psychology over the years has unearthed many findings over how individuals make decisions. Thaler (1993) reviews the application of psychology to financial markets, questioning the foundations of Fama's efficient market hypothesis (1965/1970). Thaler (1993) notes that there is a gulf between academic explorations and modelling of financial economics with general perceptions and views, writing that '*whenever financial markets make it on the news the story is always accompanied by pictures of people engaged in wild activity*' (Thaler, 1993: xv). The dominant image is that financial markets are driven by *people* such that the thought arises *are markets any different because of human presence and involvement?* As technology progresses, we are left with the question still remaining *would the financial world be materially different if investors, traders, managers, and workers were all replaced by computer programs?* (Thaler, 1993: xv). Richard Thaler concludes yes and given the evidence it is hard to disagree.

If we consider some of the findings from behavioural finance we can see the intuition behind Thaler's certainty. Fisher Black (1986) produced one of the early papers related to what he termed *financial noise*, the idea that people trade on what they perceive to be information but in reality, is information that means little or nothing. Such trading can result in a large divergence between a security's fundamental value and its prevailing market price. For example, Lee, Shleifer and Thaler (1991) explore noise in the closed-end fund puzzle[1] and write that '*investor sentiment can represent trading on noise rather than news*'

[1] A closed-end fund is, similar to an open-end fund, a mutual fund which typically invests in publicly traded equities. Where a closed-end fund differs from an open-end fund lies in the fact that a closed-end fund holds a fixed number of shares while an open-end fund can reissue equity without a restricted limit. The closed-end fund puzzle is a financial anomaly that has found that closed-end fund shares tend to sell at prices that are not equal to the per share market value of the securities held by the fund itself. These prices can be at either a premia or at a discount.

(Thaler, 1993: 60). They find that discounts in the value of shares of closed-end funds are high when investors are pessimistic about future returns, while discounts are low when investors are optimistic (Thaler, 1993: 100).

As research has progressed, the influence of people on financial markets became increasingly apparent. John Kenneth Galbraith wrote in his seminal work *A Short History or Financial Euphoria* in 1990 that '*not only fools but quite a lot of other people are recurrently separated from their money in the moment of speculative euphoria*' (Galbraith, 1993: viii) concluding that '*recurrent speculative insanity and the associated financial deprivation and larger devastation are…inherent in the system*' (Galbraith, 1993: viii). No longer can research ignore the power of people and indeed this is no truer than in the fields of economics and finance.

However, while nearly all agree that psychological influences can have an impact on decision-making, there is continued disagreement over whether or not these actually matter at an aggregate level. Fama (1965/1970) wrote that efficient markets are random and unpredictable. Yet, notable anomalies appeared with statistical and economic significance, including returns increasing during January (Rozeff and Kinney, 1976), higher returns than expected for small firms (Banz, 1981; Reinaganum, 1981; Fama and French, 1992), value effects derived from positive relations between returns and accounting-based cash flow/value ratios plotted against market prices (Graham and Dodd, 1940; Ball, 1978; Basu, 1977), return predictability via price momentum (Jegadeesh and Titman, 1993; Cahart, 1997), weekend effects with negative returns on Mondays (French, 1980)…the list could go on. Fama (1991) himself notes in the light of such evidence, the issue of whether or not markets are efficient has become much '*thornier*'.

If these findings mean that investment decisions can be less than fully rational at times, then research began to focus on the effects exerted upon various decisions undertaken. Being one of the largest investment decisions made by a firm, research into mergers and acquisitions began to focus on the motivations and incentives behind explaining why transactions occurred and what stock price effects were experienced by acquirers and their targets. Trautwein (1990) neatly summarises the competing theories behind corporate marriages, including neoclassical rational motives such as the theories of efficiency, monopoly, raider, disturbance and process, as well as the less than rational motives of valuation and empire-building.

Chapter Three of this thesis examines the decision to merge and the consequential effects on returns, focussing primarily on valuation theory at a firm and market level. The market-timing hypothesis of Shleifer and Vishny (2003) motivates mergers as a rational managerial response to an inefficient market. The market, infected by noise, has priced the acquirer at a level exceeding its fundamental value. This means that long-term, once the market corrects for its mistake, losses will be incurred as the acquirer's stock price falls downwards to its true fundamental level. The market-timing hypothesis reasons that a rational manager in pursuit of shareholder wealth maximisation must think of ways in which (s)he can maintain the superior price level of the firm. One such way is via a merger and acquisition. In this scenario, the acquirer can raise the fundamental value of the firm through buying the target's assets. This leads to shareholder wealth creation when the acquirer does so using the firm's overvalued equity, under the condition that the target must be less overvalued than the acquirer.

In addition to the market-timing hypothesis, Bouwman, Fuller and Nain (2009) and Petmezas (2009) reason that while the valuation of the firm is important, so is the valuation of the market. Galbraith (1990) concluded that booms and busts are inherent parts of the financial system. When making an investment decision therefore, the macroeconomic climate can also exert an influence on managers. A sizeable portion of academic research has revealed that mergers do come in waves, and that the quality of mergers undertaken can be influenced by market-wide conditions. Rhodes-Kropf and Viswanathan (2004) show that market-wide misvaluation can lead to ex-post poor financial decisions correlated at a market and industry level. When market conditions are booming such that prices are rising, targets can fail to correctly filter out the market-wide price effect and accept bids that appear more attractive than what they actually are. So in this sense, for an acquirer, deals that are initiated in booming periods are worse than those initiated when markets are depressed (Bouwman, Fuller and Nain, 2009: 634).

Chapter Three examines these two anomalies simultaneously in the UK market, extending the previous literature through reassessing whether or not UK mergers create value using an intuitive comparative assessment approach. If mergers are to the benefit of acquiring firm shareholders, then those deals that complete should outperform those that do not complete. Thus Chapter Three stratifies a sample of UK M&As according to deal outcome, with successful deals contrasted against those which fail to consummate. The methodological approach is unique in that it stratifies the sample of failed deals according to the reason for the failure of the deal. Using hand-collected data from the newspaper database LexisNexis UK, a sample of deals that fail for reasons outside of the acquirer's control is established. This robustly controls for any endogeneity issues in the econometric procedure.

The successful and failed samples are then stratified according to the two anomalies explored by the chapter – firm misvaluation and market-wide misvaluation. Misvaluation at the firm-level is captured using a rolling twelve-month and twenty-four month historical acquirer P/E ratio. If the P/E ratio on the announcement month or pre-announcement month is higher (lower) than the twelve-month average P/E (or twenty-four month average P/E), then the firm is deemed to be above (below) its fundamental value. We then take the top (bottom) 30% of the above-fundamental value deals and classify them as overvalued (undervalued). We use this information to construct overvalued and undervalued portfolios in short and long-run analyses for both successful and failed acquirers.

In addition to firm misvaluation, market misvaluation is captured using a detrended market P/E ratio. Given inflation and other effects, firms' P/E ratios tend to drift upward over time and thus without detrending the P/E ratio, the sample would see more high (low) value periods later (earlier) in the sample period. If the month of the transaction has a market P/E ratio higher (lower) than the preceding five-year average then the month is classified as above-average (below-average). The top 25% of the above-average months (and the deals announced within these months) are classified as high-valuation while the bottom 25% of the below-average months and the deals announced within these months are classified as low-valuation (Bouwman, Fuller and Nain, 2009).

Chapter Three finds that firms that are overvalued do not create long-term value for shareholders. Shleifer and Vishny (2003) and Savor and Lu (2009) reason that despite long-run negative returns for shareholders, value is created if an acquirer that pays for a target using equity and subsequently successfully completes the transaction outperforms an acquirer who announces an intention to pay for a target with equity but fails to do so. This thesis does not find support for this finding and indeed finds that firms which fail experience significant wealth losses indicative of a punishing market. However, undervalued firms perform better than overvalued ones with better returns through lower losses during the long-term post-merger period. Draper and Paudyal (2008) reason that undervaluation serves as a strong motive for merger activity as it attracts attention to the firm to invoke an upward price correction while also adding value to the fundamental level of the firm through the addition of the target's assets. Chapter Three suggests that undervaluation is a stronger motive for merger activity in the UK as shareholders benefit at least from the revaluation of the firm, even if the deal fails.

When the valuation of the market is controlled for, the results indicate that deals announced in high-valuation market conditions outperform those announced in low-valuation conditions over the long-term.

This can be considered as a proxy for sentiment as when the market is performing better people within the economy tend to be optimistic about the future pushing prices today up through increased demand in the short-term. Market participants feel optimistic that they will receive the same or higher income in the future and thus consume more today. This increases the revenues for firms who then proceed to invest, with mergers as a vehicle in which to do so. When the market is highly valued and this is taking place, returns in the short-term generate significant wealth gains for acquirers. However, in the long-term, the market corrects its overreaction and moves back towards its efficient long-run equilibrium. The results in Chapter Three show that when this happens, a significant downward correction takes place. In fact, deals which are conducted in low-valuation market periods generate a significantly higher performance than those undertaken during high-valuation markets over a 24 and 36 month period.

One anomaly of the UK market lies in its preference for cash payments. Faccio and Masulis (2005) show that 80.2% of UK transactions are paid for using only cash. Doukas and Petmezas (2007) also provide further support for this conclusion. Yet despite this cash-preference, little research has explored where this cash is coming from and indeed what impact capital structure changes have upon acquirer merger performance.

Capital structure and firm value have been explored in a plethora of literature. Modigliani and Miller in 1958 and 1963 developed the theory of the firm which resulted in the commonly termed trade-off model of capital structure. The trade-off theory simply models the decision over equity versus debt as a result of a simultaneous balance between firms benefitting shareholders through the tax deductibility of interest rate payments on debt, with the financial distress costs of bankruptcy when gearing is excessively high. Thus in a merger setting, the choice between equity and debt would be directly dependent upon the acquirer and target's prevailing use of their debt capacity and the consequential post-merger capital structured mix.

Despite the simplicity and intuition of the trade-off model, anomalies once again emerged. These included market-wide findings that the most profitable firms in an industry tend to hold the lowest level of gearing (Titman and Wessels, 1988; Shyam-Sunder and Myers, 1999) as well as a positive market reaction to increases in a firm's level of leverage (Ghosh and Jain, 2000). Addressing these problems, Stewart C. Myers (1984) adapted the capital structure decision in the pecking-order model, which indicates that managers have a preference for internal relative to external financing because of the information that the decision to issue conveys to the market. Once internal capital markets have been exhausted, the firm will look towards accessing capital externally. Myers (1984) reasons that when firms move to raise funds through external capital markets then they should initially look to do so through issuing debt before equity. This is built on the premise that a manager that issues equity without exhausting the debt capacity of the company must believe the stock price of the firm to be overvalued as otherwise this would be a less than rational decision. This argument has been applied to M&As to explain the anomaly of underperformance following stock acquisitions (Travlos, 1987).

Relaxing market efficiency, Baker and Wurgler (2002) developed the latest interpretation of capital structure proposing that managers are skilled enough to exploit temporary misvaluations in equity prices so that the decision over whether or not to issue equity is dependent upon the prevailing level of misvaluation of the company at said point in time. Thus capital structure is modelled as nothing more than the result of persistent managerial attempts to time capital markets.

Chapter Four combines the decision to issue debt or equity with the major investment decision of a firm, a M&A. The M&A sample is stratified into two samples – those that issue securities to the market in the three years before the merger announcement (Issuers) and those that do not (Non-Issuers). Moreover, the Issuer sample is then sub-stratified according to the type of security issued – debt or equity – creating the Debt Issuer and Equity Issuer samples respectively.

The first hypothesis of the chapter proposes that firms which issue equity will underperform those that do not in terms of merger gains. This is built on the evidence and intuition of Myers (1984), Travlos (1987), Baker and Wurgler (2002) and Shleifer and Vishny (2003). Equity issuers who conduct M&As three years post-issuance should experience an underperformance relative to those that do not issue equity due to the information conveyed signalling potential overvaluation. The second hypothesis proposes that firms that issue debt should outperform those that do not due to governance and disciplinary increases of debt-monitoring (Jensen, 1986; Jensen and Smith, 1985) due to the obligatory payouts that debt induces for a firm.

Chapter Four finds that acquirers classified as issuers significantly underperform non-issuers in the short-term, principally in stock-financed transactions. However, equity issuers do not perform significantly differently to those that do not issue equity thus no support is found for hypothesis one. However, in the long-term, stronger support for hypothesis one is found where equity issuers earn 10.77% (0.012) less from announcement than those acquirers which do not issue equity. This finding is also true for small firms but not for glamour ones over the thirty-six month post-merger period. Thus, the issuance of equity before a merger does lead to an economic and statistical underperformance of acquirers therefore executives focussed on acquiring should avoid the issuance of equity before the merger announcement, and instead could issue equity during the transaction itself.

In relation to the second hypothesis, the results strongly support the issuance of debt. Those acquirers that have issued debt have a statistically significantly better merger performance than those that do not, particularly over the long-term. In the short-term, large acquirers and value acquirers that issue debt earn significantly higher returns that those that do not. In the long-term, debt issuers earn 19.65% (0.000) higher returns than non-debt issuers (primarily through a reduction of losses circa 8.58% (0.003)). Moreover, Debt Issuers significantly outperform Equity Issuers long-term by 16.67% (0.000). Thus firms that issue debt perform significantly better than those that do not and thus debt is provided as a key vehicle for managerial discipline.

Chapter Five of this thesis concludes the empirical investigations by examining the power of the press over acquirer returns. A plethora of literature has evolved examining the impact of mass media on firm performance and public perceptions. The media has long been an integral source of opinion and information for those making an investment decision. Events identified by editorial boards as worthwhile news stories across the world are highlighted to the masses via printed and online media (Dyck and Zingales, 2003). Mass media occupies an institutional role in modern society in the production and dissemination of information regarding *novel developments* (Petkova et al., 2013). In this way, mass media directly controls what information becomes widely available and indeed in what manner it is distributed.

The rise of advanced technologies that have led to online replications of news publications have shortened the time that it takes for information to be globally disseminated. Scheufele et al. (2011) notes that an efficient market – i.e. one in which market prices fully reflect all available information – is only efficient in relation to specific subsets of information – i.e. past information, publicly available information, and privately held information. Mass media serves to distribute publicly available information to the masses, while journalists are perceived to be a catalyst that can facilitate the transmission of information from the privately-held to publicly held sector.

In a report discussing the supply chain of newspaper and magazine distributions, the Office of Fair Trading reported that in 2007, circa 14 million national newspapers were delivered to around 54,000 retailers across the UK on a daily basis, even hitting small and remote locations such as in the highlands of Scotland. Moreover, the development of the internet from the mid-nineties to the present day has seen the dissemination of information alter this supply chain such that readers can receive news updates at a much faster pace. Whereas before 2000, individuals would have time to absorb information that had occurred the day before, post-millennia has seen these articles becoming available almost instantaneously online. In this light, markets have become increasingly volatile and ultimately are being governed less by rational fundamentals, as was once outlined by the Efficient Markets Hypothesis of Fama (1965, 1970), and more by market sentiment (Swarup, 2013).

Existing evidence has indicated that there may be a link between the content of news with investor psychology and sociology (Tetlock, 2007). However, the evidence is mixed regarding exactly whether this media *induces, amplifies, or simply reflects investors' interpretations of stock market performance* (Tetlock, 2007: 1139). The known presence of *animal spirits* has led many researchers to try to decipher what it is that can influence an investors' emotion and lead to less than rational investment decision-making. Given the unanswered question of whether firms initiating M&As win or lose, Chapter Five contributes to the existing knowledge-bank through exploring the role of mass media in acquirer returns. To my knowledge this chapter is the first to undertake such research and indeed the first to find evidence that acquirer returns are in fact influenced by mass media in both the short and long run.

To capture media coverage of acquirers, all articles for all listed UK firms spanning from 1989 to 2008 from the media database LexisNexis UK are downloaded. These articles are sources from major UK publications as filtered by the database itself, using supply and sales of the tier one UK newspapers and magazines. This sample is then matched to a M&A sample downloaded from Thomson One Banker for the sample period from 1990 to the end of 2008. Chapter Five then uses a combination of the methodological approaches of Tetlock (2007), Tetlock et al. (2008), Fang and Peress (2009), Loughran and McDonald (2010) and Garcia (2013) to classify the level of media coverage for each acquirer for up to twelve months before the M&A announcement, as well as the general level of pessimism within the coverage found.

Chapter Five reports that a portfolio of acquirers that have media coverage before the announcement of a M&A earn statistically significant lower returns at announcement than those within a portfolio of acquirers that are not covered in tier one media – some -0.45% (0.053) lower - while this is reversed over the longer term with statistically significant lower losses - some 29.88% (0.000) better - for acquirers covered in the media providing a statistical long-term positive effect for shareholders of acquirers covered by the media. Moreover, cross-sectional analyses reveal that the level of pessimism of the content of said media is positively related to acquirer returns over a thirty-six month period implying that the stronger the pessimism of the media coverage prior to the announcement, the better the long-term returns suggestive of price pressure in the short term that is corrected over a three year period.

Chapter Five contributes to the existing literature by finding evidence that the media exerts a statistically significant effect on acquirer returns in both the short and long term. While it is recognized already that information dissemination is crucial for a firm's cost of capital and stock returns, the previous literature has not assessed the role and effects of mass media as a distributor of information in a M&A setting. The results indicate that acquiring firm managers would best serve shareholders over the long run by undertaking a consistent PR pre-announcement campaign to place their firm in investors' minds.

The remainder of this thesis is organized as follows Chapter Two reviews the existing literature providing an introduction to known anomalies that have been proven to explain acquirer's merger returns. Chapter Three empirically examines value creation using a comparative-assessment approach controlling for firm and market-level misvaluations. Chapter Four empirically investigates the impact of issuing debt or equity before a merger upon an acquirer's short and long-term merger performance. Chapter Five explores the relationship between media coverage and attitude with acquirer performance. Chapter Six concludes the thesis, discussing the main findings and contributions made.

Chapter Two: Literature Review

In this chapter, the existing literature is reviewed in relation to the prevailing evidence regarding Mergers and Acquisitions. The discussions begin by defining the terms of the thesis before moving into the literature focussed on ascertaining why mergers occur. This covers those motives emanating from the schools of both neoclassical and behavioural finance. The thesis progresses to then analyse the general findings in relation to gains from transactions, incorporating known anomalies and their effects. The chapter concludes by outlining the motivations for further study in this area.

2. Chapter Two: Literature Review

"Finally, knowledge of the source of takeover gains still eludes us."

Jensen and Ruback (1983: 47)

Mergers and Acquisitions are one of the most widely researched fields in academia. There have been a number of merger waves, each with its only characteristics and environmental factors driving firms to come together. Yet despite the growing volume and value of mergers over the years, much still remains ambiguous. Mergers represent a great conflict between scholars. Widely found negative performance in the long-run after the completion of a deal inherently challenges the ideals of efficient markets. While mergers were once considered to be a way for firms to efficiently reduce risk, today's research argues that the long-run underperformance signals an inefficiency of incumbent managerial teams. Thus despite being a long-standing area of academic discussion, much is still to be uncovered and clarified. It is the aim of this work to develop a strong understanding of the existing literature and its debate in order to gain a deeper knowledge of both past and present empirical evidence in this area. This will help to ensure the following investigations of the thesis will be valuable alongside such similar works to help make a contribution to this active academic field.

2.1. Definitions

There are many definitions used for the various terms of the forthcoming work within the literature. It is therefore required that we distinguish what is meant within this thesis when we employ these terms.

2.1.1. Merger

The Oxford English Dictionary defines a merger as the '*combination or amalgamation of a commercial company, institution, etc., with another or the consolidation of two or more companies, etc., into one*'. It is the combining of two or more entities into one through a purchase acquisition or a pooling of interests (Investor Worlds). Mergers are usually employed by firms as a vehicle in which they can expand their operations and subsequently hope to increase the firm's profits. The term '*merger*' itself implies the willing co-operation of each party and avoids any implication that one company plays a dominant. Mergers can take many forms, these being - horizontal mergers; vertical mergers; or conglomerate mergers.

The Oxford English Dictionary defines a horizontal merger as '*an industrial merger of firms engaged in the same stages or types of manufacture'*. A horizontal merger is a merger of two or more companies with similar product lines (Investor Worlds), i.e. two firms operating within the same kind of market. An example of such a deal would be the Daimler-Chrysler merger. The two firms believe that merging with the other will eliminate duplicated plant, equipment and staff so that greater efficiencies of scale and productivity can be achieved. The main focus of the merger enforcement policy in all OECD countries with a merger policy has primarily centred upon horizontal mergers and their implications (OECD). This is consistent with the strong government interest in competition within particular markets particularly given concerns regarding the superiority of firms dominating particular industries to the detriment of competition and the consumer.

While a horizontal merger involves two firms operating within the same sector, a vertical merger is essentially a merger between firms in different stages of production. With industry similarity, the firms hope to benefit from economies of vertical integration. The target firm believe they can gain greater cost efficiencies through joining their suppliers whilst the supplier may view the merger as a use for surplus funds for example.

From this we can see the progression towards merging with another firm which has no apparent similarity in either operations or product line as our own. This may be desirable for diversification purposes in terms of a risk-reduction strategy. This essentially constitutes a conglomerate merger. Conglomerate mergers themselves primarily take place when firms attempt to achieve control over various distribution channels which otherwise could be capitalised upon by rival entrants (Gabrielson, 1999). They are mergers between firms in unrelated or indirectly related industries (Mueller, 1969) and are often used as a way to gain entry into new foreign markets. Famous conglomerates are those such as Proctor and Gamble in which the firm's business is not confined to one field but rather offsets various economic cycles and so forth through investing in a variety of industry sectors.

Strictly speaking, there are two forms for conglomerate mergers. A 'pure' conglomerate merger involves the acquisition of products which are not related on the demand or supply side; it is a merger in which there is no horizontal, vertical, complementary or neighbourhood relationship between the producers (Church, 2004) - that is the two firms are entirely unrelated in their operations. The second form is termed a 'mixed' conglomerate merger. These involve firms which are searching for product or market extensions (Investopedia) and do so through merger activity.

2.1.2. Acquisition

An acquisition occurs when one firm buys another and ends up completely controlling it (Business Link). It is the act of one corporation acquiring a controlling interest in another company (Wallingford Capital Corporation). The bidding firm may enforce strict terms to the process or indeed could enter into an integration agreement with the target firm to exchange assets (Small Business Notes). Whilst a merger suggests no dominance to either side, an acquisition assumes that the acquirer will become the controlling partner within the new combined entity. In this way, acquisitions can sometimes be of a different nature to mergers and may involve hostile bids with the acquirer slowly acquiring control over a set period of time.

2.1.3. Takeover

The Oxford English Dictionary details a takeover '*as the assumption of control or ownership of a business concern by another company, especially by the acquisition of the majority of its shares, either by agreement or after a take-over bid*'. It may be defined as a series of transactions whereby control is achieved over the assets of a company. In this way, it can be viewed as the actual process facilitating the acquisition of a firm.

2.1.4. A Successful Merger

Essentially a successful merger is one in which the original motives for the merger are achieved. There are a number of works concerning the motives for mergers (see Trautwein, 1990) ranging from Efficiency theories (see Seth et al, 2000; De Bondt and Thompson, 1992), Monopoly theories (Perry and Porter, 1985), Empire Building theories (see Mueller, 1969; Ravenscraft and Scherer, 1987; Black, 1989; Berle and Means, 1933; Jensen and Meckling, 1976) to suggestions that mergers are simply a result of economic disturbances within the external economy which combine to instigate merger waves (Gort, 1969). These will be presented in the forthcoming section in more depth.

The key objective of the firm is to maximise the wealth of the investors and in this way, the success of a merger is defined upon whether the combined firm has provided a higher level of wealth for its investors. It is typically considered that it is target firm shareholders which gain (Sudarsanam and Mahate (2003); Black (1989)) whilst in the long run, the bidding firm investors suffer the effects of bidder overpayment with high premiums being paid (Roll, 1986; Healy, Palepu and Ruback, 1992). Why firms continue to conduct mergers in the face of such evidence still remains unknown and this has given birth to behavioural finance. This will form a key theme in the studies within this thesis.

In this work, a successful completion is defined as one in which the acquirer gains control of the target (with a holding of +51%). A 'successful' deal is defined as one in which the acquiring firm increases the returns for the shareholder group in the long-term as a result of the merger undertaken.

2.1.5. A Failed Merger

Mergers do not always succeed and there are various explanations as to why. Some factors remain outside the control of the firm, such as legislation and regulation changes. Other factors can become more firm-specific, such as valuation changes in the acquirer or competing bids.

Within this thesis, a failed merger will refer to a deal which has been withdrawn and has not successfully completed. In this way, the target firm remains a separate entity with the acquirer gaining no legal ownership. It is the intention of the work to ascertain why these deals fail and this will form heavily within the multivariate analysis work to be conducted.

2.1.6. Neoclassical Finance

Neoclassical finance or economics relates to the birth of financial research. It is largely structured upon the foundations of rational market players which seek to maximise their expected utility given the constraints of their present value budget (Samuelson, 1967; Shiller, 2006). The concept of rational market players allowed for research to develop many of the asset-pricing models we use today.

Key concepts of neoclassical finance largely centre upon the idea of efficient markets, defined as a market in which '*prices always 'fully reflect' available information*' (Fama, 1970). Fama (1970) introduced the Efficient Markets hypothesis upon completion of his PhD and presented three market forms. The first is referred to as 'Weak-Form Market Efficiency' and this form is predominantly concerned with incorporating information from the past. It writes that a market is 'weak-form' efficient if prices reflect all past information. Efficiency is enhanced in a 'semi-strong' form market with all publicly available information also incorporated within a securities price. Finally, the most elite and efficient market is termed 'strong' form. This market includes all past, all publicly and all privately held information into the securities prices. This final stage has been rigorously tested and the profits generated by insiders (Jaffe, 1974) contradict its validity.

There is much debate over the validity of an 'efficient' market and subsequently also neoclassical financial theories. This has led to the emergence of behavioural finance. The conflict between the two schools of thought will form a recurring theme throughout this work. Within this thesis, neoclassical finance will refer to theories relating to merger activity which broadly follow an efficient market[2].

2.1.7. Behavioural Finance

Behavioural Finance is described as '*the study of how humans interpret and act on information to make informed investment decisions*' (Lintner, 1998: 7). Incorporating the psychological aspect inherent within the modern financial world, behavioural finance relaxes the constraint that market participants be fully rational. It allows for individuals to be '*less than fully rational some of the time*' (Thaler, 1993: XVII).

Since it's conception in the early eighties, behavioural finance has given birth to many alternative explanations to the anomalies left unanswered by neoclassical finance, such as the outperformance of value acquirers by those termed 'glamour' or the fact that smaller acquirers tend to exhibit superior post-merger performance than those classified as 'large' (Petmezas, 2009: 55).

While many academics defensively stick to the tenets of neoclassical finance, Shiller (2006) notes that the two fields of research need not be mutually exclusive. The truth will, as ever, lie somewhere in between and the rapid progress currently being witnessed by the academic world in terms of the level of understanding we possess over how the markets work has undoubtedly been propelled since the adoption of behavioural viewpoints. There is, however, much more still to learn and while Daniel Goleman (Emotional Intelligence) has profoundly stressed the importance of EQ over IQ, behavioural finance is ultimately destined to usurp traditional statistical analysis as the market gravitates towards practical pragmatic models which can endure all economic situations.

Academic research in the early eighties began to examine why stock price indices varied, focussing specifically on what information arrivals could explain the variability witnessed. Shiller

[2] One such theory would be the reasoning for merger activity being as a result of a market shock for example. See Gort (1969).

(1981) and, LeRoy and Porter (1981) found that the movement of stock price indices could not be explained by information regarding future dividends (Grossman and Shiller, 1981: 222). Grossman and Shiller (1981) explored whether the variability of stock prices could be explained by information related to interest rates under the argument that such factors exert both a direct and indirect impact upon current and future levels of economic activity (Grossman and Shiller, 1981: 222). The empirical results indicated that indeed real interest rates vary and do exert an impact on stock price movements.

Shiller's work into why stock prices vary marked a new pathway into accepting less than perfect rationality in financial markets. In 1990, Shiller summarised his evidence to date in the paper 'Market Volatility and Investor Behavior' indicating the need to explore and adjust for "fads" in prices. His work and findings are largely attributed as some of the early key works in behavioural finance and asset pricing.

Within this thesis, behavioural finance will pertain to models and theories which accept the less than fully rational behaviour of market participants. The true usefulness of these theories will undoubtedly be unveiled as we delve deeper into the behavioural offerings in the forthcoming work.

2.2. Merger Motives

It remains an intriguing question over why firms decide to initiate a merger. Whilst much work has been conducted, this key question still continues to drive merger research. The confusion lies within the post-merger effects for the two firms. Whilst the target largely gains (Jensen and Ruback, 1983), the acquiring firm shareholders are not so fortunate earning negative to zero abnormal returns (Mueller, 1985; Loughran and Vijh, 1997; Antoniou *et al.*, 2007). It is the question of why firms merge which drives behavioural theorists to continue to formulate potential explanatory models, with theories such as market-timing and catering amongst a long line of others coming to fruition.

Theoretical conjecture relating to merger motives notes the evidence showing that merger activity appears to come in waves, with each wave having its own key motivator, such as regulation changes or economic factors which give way to favourable merger conditions. There are many theories such as *disturbance*, *efficiency*, *monopoly*, *empire-building*, *asymmetric information*, *valuation*, *process*, *raider*, *market-timing* and *catering*, to name but a few. Let us continue with a further exploration of the main theories alongside their validity within financial research.

2.2.1. Disturbance Theory

One theory emanating from early merger research is that of Gort (1969), commonly referred to as the 'Disturbance' theory of merger activity. Gort (1969) develops a model which bases merger activity upon changes in valuations as a result of an economic disturbance, which he implicitly assumes to primarily be as a result of a technological change within the market or a movement in the firm's security price. Either way, the economic disturbance gives way to a break between the past and the future. When either of these disturbances occurs, it marks a new path for the firm, breaking away from the past. The investor and market is unable to efficiently use the past information to predict the future income streams of the firm. In this way, it is not reliable to use past information to estimate your investment. As a result, the general level of uncertainty concerning the firm becomes higher and we can see a greater variation between the values generated by owners of firms, and those generated by non-owners. This can lead to non-owners generating higher valuations for prospective targets than their current owners and thus a merger wave is instigated.

For this theory to hold, Gort (1969) requires two conditions to be satisfied. Firstly, a non-owner must hold a valuation of the target which is higher than the believed valuation by the target owners. If this were not true, then the non-owner would never win a bid and it would be unsuccessful as the owners would not accept a lower value for an asset which they believe has a higher intrinsic value. Secondly, the acquirer must be able to obtain the largest surplus (defined as the non-owner estimate value of the target minus the prevailing market value) from buying this firm out of the pool of firms which match the first condition. If this did not hold, then the acquirer (the non-owner) would purchase an alternative target to get a higher profit.

In a critique of the theory, Trautwein (1990) lists three reasons as to why this theory does not provide a thorough explanation of merger activity. First of all, the model developed does not address the institutional aspects inherent in merger activity. This is pivotal in explaining merger waves such as experienced in the late sixties, which seemingly had no 'economic' disturbance. Secondly, of the type defined by Gort (1969), disturbances and their effects tend to be confined to certain industries due to the sectoral nature of their occurrence. Finally, Trautwein (1990) explains that the theory is somewhat incomplete with an inability to effectively prove how an individual's expectations change as a result of an economic disturbance. Still lacking a thorough explanation, research continued.

2.2.2. Efficiency Theory

Efficiency theory portrays mergers as planned corporate events, undertaken by managers seeking to achieve '*synergy*'. Derived from the Greek word '*Sunergos*', which translates to '*working together*' (Oxford English Dictionary: Compact), synergy can be defined as the '*interaction or cooperation of two or more agents to produce a combined effect greater than the sum of their separate effects*' (Oxford English Dictionary: Compact). In essence, synergy relates to the corporate idea that one plus one can be equal to three. Berkovitch and Narayanan (1993) write that the idea of synergy suggests that mergers are as a result of the economic, or efficiency, gains which can result through the combination of the resources of the two companies in question.

Synergy is thought to be able to be extracted from three main sources – operations, finances or via management improvements. Operational synergy is the most obvious of the three with gains being achieved through the removal of duplicated operations between a related target and bidder, in manufacturing processes for example (Lubatkin, 1983). This synergy is usually confined to those deals in which there is some degree of relatedness between the bidder and the target firm otherwise there would not be any similar operational processes. Furthermore, a vertical merger could lead to synergies between supplier and retailer through less expropriation (Weston and Chung, 1983).

This does not, however, mean that synergies overall are confined to related deals. In fact, Larsson and Finkelstein (1999) present two sources of gains from either '*economies of sameness*', as outlined above, or '*economies of fitness*'. Economies of fitness refer to those synergies available from the merger of two operationally complementary firms. These firms may not be involved in the same line of business, but their operations can and hopefully will complement each other.

Even in deals where the two firms are not particularly alike, synergies can still be sought. In a conglomerate merger for example, diversification is often cited as the major motive (Kitching, 1967). This lowering of risk leads to what is commonly termed financial synergy. Trautwein (1990: 284) writes that a company can gain financial synergies through lowering the systematic risk faced by the firm resulting in lower overall costs of capital. Equally the larger size of the post-combination firm can allow for heightened bargaining power on the part of managers when seeking external capital. Furthermore, managerial synergies are posited to be as a result of a better manager assuming control over the target after the corporate marriage. The superiority of the acquiring firm management team raises the efficiency of the target and this is to the benefit of the shareholders involved.

A particular derivation of the efficiency motive is Jensen's Management Competition model (Jensen and Ruback, 1983). The Management Competition model implies that efficiencies are sought through the improved disciplinary forces upon the acquiring management team. The quest for corporate control within the market is presented as a way in which managers can compete with one another for the assumption of rights to manage available corporate resources. In this way, managerial competition within the model '*limits divergence from shareholder wealth maximisation by managers and provides the mechanism through which…synergies…are realized*' (Jensen and Ruback, 1983: 6).

However, are synergies actually realized? Kitching (1967) writes that whilst firms announce merger synergies, they are seldom realized and the key to the overall successful of the deal is the effective post-completion management. He calls these individuals '*managers of change*' (Kitching, 1967: 91) and explains that it is the effectiveness of the managerial team in combining the two firms and changing the nature of the two separate entities into one which ultimately sows the seeds of increased wealth.

2.2.3. Monopoly Theory

Cited by managers as a key incentive for merger activity, the quest for market power governs monopoly theory (Jensen and Ruback, 1983; Srinivasan and Mishra, 2007). Typically assumed to be confined to horizontal merger deals, firms can achieve increased market power through the acquisition of a rival or complementary firm (Trautwein, 1990). Examples of such activity could be the UK acquisition of the UK operations for Safeway plc by Wm. Morrison plc, executed as a means of achieving greater market share for the latter to compete better with the market leaders – Tesco, Asda and J. Sainsbury.

However, monopoly power is not just sought with the acquisition of related targets. For example, the acquisition of a profitable target from an unrelated industry could boost the profitability of the acquirer so that it becomes in a better position to compete within its core market (Trautwein, 1990). Through gaining higher cash flows, the acquiring firm can pool more resources into research and development with the resultant effect of improving the attractiveness of the firm through its ability to stay at the forefront of the market.

2.2.4. Empire-Building Theory

Empire-Building theory assumes that mergers are undertaken by managers who are driven by their own personal motive – to maximise their own utility. They do so in a variety of ways which ultimately destroy the wealth of the shareholder group. The theory emanates from the agency conflicts that are apparent due to the separation of ownership and control within a firm's structure with managers as agents to the principal shareholders (Jensen and Meckling, 1976). Trautwein (1990: 287) explains that empire-building leads to '*the maximisation of managers' goals subject to constraints put up on them by the capital market*'.

This theory has coveted great attention as it fits neatly into the realm of behavioural finance. Managers may rationally work for their own goals but actually fall victim of irrationality in the essence that they do not foresee how such actions can directly impact on their ability to retain employment with the firm. Many managers which work for their own goals can lead their firms to become targets for acquirers while others may draw attention to their behaviour by unexpectedly announcing merger prospects. Either way, empire-building is a certain feature of corporate life and undoubtedly plays a role in merger activity.

2.2.5. Hubris Hypothesis

Rooted in psychological analysis, hubris is generally defined as an individual's excessive self-confidence or pride. Richard Roll was the first academic to transfer the coveted psychological literature pertaining to hubris to merger activities in 1986. He presented managers as individuals with the tendency to lean towards excessive optimism of the future and extreme overconfidence towards their own abilities to lead their firms. Unlike the empire-building and managerial competition models, hubris simply implies that managers initiate mergers because they are overconfident and subsequently over-invest.

Jensen and Ruback (1983) conclude that mergers generate significant negative effects for a bidding firm on the announcement of their deal. Roll (1986) takes this finding as being consistent with hubris. Managers who are infected with hubris believe that they are much better equipped than their counterparts to be able to effectively lead a company. This heightened confidence regarding the competency of the individual manager leads them to mergers as they believe themselves capable of successfully completing a merger deal. They see the evidence that mergers destroy bidding firm's value but disregard this as their confidence in their own skills leads them to believe this could not happen to their merger deal. They underestimate the risk involved in mergers and give little weight to evidence suggesting wealth destruction whilst these overconfident managers simultaneously rate potential synergies higher than their actual level. These factors combined help explain merger activity, given the poor returns experienced by bidders, but at the same time lead to even higher losses than the average and thus other factors must still be involved in the process.

The empirical evidence related to hubris is largely unanimous in its findings that such infected managers destroy even more corporate value. Malmendier and Tate are world renowned academics in the hubris literature, researching CEO characteristics and their effects on CEO's corporate decision making. In 2005, they argued that overconfident managers will invest highly when their firms have an abundance of internal financial resources to fund such activity. Conversely, when CEO's would have to acquire external capital to fund prospective investments, they shy away from doing so for key reasons such as both overestimating the returns on offer from the said investment as well as their disparate belief over the true worth of the firm which they manage. This misalignment with the market is found in their 2005 work to significantly explain corporate investment distortions. The 'better than average' view of the manager significantly impacts on their ability to effectively manage the investments of the firms they lead.

In later work, their findings have been found to be true. Their work in 2009 pertaining to Superstar CEO's studies the effects on firm performance after the CEO receives an award and a subsequent boost to their performance. Yet again, the confidence of the manager becomes heightened and the firms significantly underperform in the following period.

More specific to merger activity, Doukas and Petmezas (2007) examine overconfident managers and suggest that such individuals are more likely to conduct frequent mergers. They argue that overconfident managers conduct more acquisitions relative to rational ones as they falsely overestimate the benefits on offer and continually negate the evidence suggesting otherwise. Equally, they will be more likely to pay using cash than stock as often, they will believe that the market has underestimated the value of their firm. The work also infers that when information asymmetry between bidder and target is high – that is, when the target is privately held with little public information known about it – the manager must rely strongly on their own personal judgment. In cases where the manager is overconfident, this will lead to more pronounced effects. Because of this, the work uses a UK dataset, taking advantage of the heavy bias towards private target acquisitions and the preference for cash-financing. Studying 1980-2004, the work finds that overconfident managers fail to cultivate significant wealth gains for shareholders from merger activity relative to rational ones. Furthermore, self-attribution is shown to induce managerial overconfidence. While short-term results generate positive returns for overconfident deals, the level of return is lower than single acquirers and when examined over the long-term, the related firms exhibit poor long-term performance. All in all, the work supports the hubris hypothesis and the negative effects it can exhibit upon shareholder wealth.

2.2.6. Market-Timing Hypothesis

One of the early models of the twenty-first century, known as the 'market-timing' model linked merger activity to the stock market. The market-timing hypothesis presented a rational manager-irrational investor framework whereby the firm can benefit from capitalising on misvaluations of the firm. Shleifer and Vishny (2003) introduced the theoretical model behind the theory and explain '*who acquires whom, the choice of the medium of payment, the valuation consequences of mergers, and merger waves*' (Shleifer and Vishny, 2003: 295). The model presented is '*able to accommodate…additional evidence…(so that) transactions are driven by stock market valuations of the merging firms*' (Shleifer and Vishny, 2003: 296). A key requisite of the theory is that the market is not continually efficient. That is, in the short-run, deviations away from true intrinsic valuations can be experienced. The rational manager capitalises through 'timing' the market and picking the most opportune moment to merge. However, whilst it is accepted that the market may suffer from short-term inefficiencies, it is required that the market is long-term efficient. If this were not true, then the manager could not benefit shareholders by strategically merging at an earlier date. Mergers in effect become '*a form of arbitrage by rational managers operating in inefficient markets*' (Shleifer and Vishny, 2003: 296).

The theory produces a range of predictions for merger activity. Shleifer and Vishny (2003) construct a scenario involving two firms, denoted 0 and 1, with two respective misvaluations of Q and Q_1, with Q_1 assumed to be greater than Q. The more overvalued firm 1 is considered to be the bidder, acquiring '*the less valuable firm 0*' (Shleifer and Vishny, 2003: 299). Within this scenario, the theoretical model is developed and makes several predications related to merger activity are as follows:

1. Acquisitions are disproportionately for stock when aggregate or industry valuations are high and for cash when they are low.
2. The volume of stock acquisition increases with the dispersion of valuations among firms.
3. Targets in cash acquisitions earn low prior returns, whereas bidders in stock acquisitions earn high prior returns.
4. Bidders in stock acquisitions exhibit signs of overvaluation such as earnings manipulation and insider selling.
5. Long-run returns to bidders are likely to be negative in stock acquisitions and positive in cash acquisitions.
6. Despite negative long-run returns, acquisitions for stock serve the interest of long-term shareholders of the bidder.
7. Acquiring a firm in another industry may yield higher long-run returns than a related acquisition.
8. Management resistance to some cash tender offers is in the interest of shareholders.
9. Managers of targets in stock acquisitions are likely to have relatively short horizons or, alternatively, get paid for agreeing to the deal.

This work has become seminal within financial research and yields much in terms of practical testability of its predictions. Behavioural researchers have already quantified many of the predictions. Investigating the characteristics of merger waves in the UK and US markets over the past century, Owen (2006) notes several confirmatory results. In support of prediction one, the 1960's conglomerate wave, for example, was largely governed by stock-financing which was accompanied with high market valuations (Dong et al., 2006; Shleifer and Vishny, 2003) whilst the hostile 1980's were undertaken during a period of low market valuations and were mainly financed using debt-financed cash (Shleifer and Vishny, 2003).

The key principle of the predictions above is that '*using overvalued shares as a means of payment enhances the claim on capital of the bidding shareholders, and thereby cushions the collapse of the shares in the long-run*' (Shleifer and Vishny, 2003: 301). It is shown that long-term returns to stock acquisitions are likely to be negative in prediction five. With the idea that stock acquisitions are as a result of managers timing the market when their firm is overvalued, then given that long-term efficiency is required, it is only logical that long-term returns be negative for these deals. The market, if it is efficient in the long-term, must recognise its mistake and correspondingly downgrade the price of these firms. Managers are believed to benefit their shareholders in the long-run by using this overvalued equity to purchase a target in the short-run. The only requirement is that the target be less overvalued than the bidder. If this holds, then the managers raise the intrinsic valuations of their firms. When this happens, it means that holders of overvalued equity will benefit through the cushioning of the stock price as the market corrects. The difference between what the original true valuation of the firm was with the new valuation of the merged firm (believed to be upward) reflects the benefit to shareholders.

Whilst much research conducted has been devoted to assessing the validity of the market-timing model, one key paper is central to the progression of work in this thesis. Savor and Lu (2009) investigate US acquisitions and construct an intuitive way in which to examine the market-timing model. They categorise bidders by deal outcome, in terms of whether the deal successfully completes or fails to consummate. With the creation of '*a sample of mergers that fail for exogenous reasons'* (Savor and Lu, 2009: 1061), these authors produce a perfect control group for assessing the true performance of bidders over the long-term. The unsuccessful acquirers sample is used as '*a proxy for how the successful ones would have performed had they not managed to close their transactions*' (Savor and Lu, 2009: 1063).

When the work separates bidders by method of payment, significant results are found for stock acquisitions. It is found that '*unsuccessful stock bidders underperform successful ones in an* *economically meaningful and statistically significant way*' (Savor and Lu, 2009: 1093), which '*increases with the length of the holding period*' (Savor and Lu, 2009: 1093). The work takes this finding as confirmation that acquirers which successfully complete their deals create value for shareholders through cushioning the collapse of long-term overvalued stock prices.

Therefore, support is found:

> '*consistent with the hypothesis that stock-financed acquirers create value for their long-term shareholders and that one mechanism by which they do so is their use of overvalued equity to purchase hard assets at an effective discount*' (Savor and Lu, 2009: 1094).

The attractiveness of the Savor and Lu (2009) approach lies in the opportunity to extend and include extra variables into the analysis conducted. Late eighties research by Lang et al. (1989) employed the use of Tobin's Q as a measure of managerial performance. The study found that bidding firms with high q values '*gain significantly more than the shareholders of low q bidders*' (Lang et al., 1989: 137) with the greatest rewards being achieved when a high q bidder acquires '*shares of a low q target*' (Lang et al., 1989: 152). It is reasoned as possibly being due to the well-managed high q bidding firm having greater opportunity to '*implement value-increasing changes*' (Lang et al., 1989: 152). However, for those in the literary field:

> '*who view q as a measure of how the market may overvalue or undervalue a firm can argue…that the results are also consistent with the view that takeovers that increase the combined value of the target and the bidder are those in which an undervalued target is acquired*' (Lang et al., 1989: 139).

The literature is therefore conflicted over how to correctly define a firm as over or undervalued and which interpretation is truly correct. Rhodes-Kropf et al. (2005) employ the use of the market-to-book ratio in an empirical investigation of potential firm misvaluation and find support for the predictions of Shleifer and Vishny (2003). The market-to-book ratio is decomposed and thoroughly analysed in the work. Within the analysis, the authors find that '*cash acquirers are less overvalued than stock acquirers*' (Rhodes-Kropf et al., 2005: 601). The results indicate that merger activity can be linked to '*short-run deviations in valuation from long-*

run trends, especially when stock is used' (Rhodes-Kropf et al., 2005: 601). Also investigating the impact of deal outcome, the paper finds that '*failed transactions have larger differences than completed transactions, while successful deals display higher levels of misvaluation*' (Rhodes-Kropf et al., 2005: 601).

Whilst support for the model within the behavioural literature is evident (Savor and Lu, 2009; Rhodes-Kropf et al., 2005; Dong et al., 2006), debate still runs strong with opposing theories continually emerging providing contrasting results. Capital liquidity (a prominent explanatory factor for M&A waves within neoclassical finance) is highlighted as the key explanatory variable of merger activity by Harford (2005) who notes that '*the relation between asset values and merger activity that is the motivation of the behavioral hypothesis reflects the capital liquidity effect rather than any misvaluation effect*' (Harford, 2005: 559). In other words, merger activity is driven by an economic shock but for a wider merger wave to occur then macroeconomic capital liquidity must increase so that it becomes a level attractive enough to facilitate acquisitions, such that financing constraints and so forth are low.

In a similar study, Gugler et al. (2006), testing four hypotheses of merger waves, actually conclude that '*the losses to shareholders of companies making acquisitions are greater than one expects, simply because the acquiring companies (are) overvalued*' (Gugler et al., 2006: 36). Overvalued acquirers are compared with comparable firms which are also overvalued but do not decide to merge. The firms which do not merger outperform those which do and the authors take this as an indication that mergers do not facilitate better returns for shareholders by 'cushioning' losses. This evidence directly refutes claims that overvalued acquirers create shareholder value in the long-run.

It appears the debate runs strong. Further investigation in this field could be promising and the literature gathered will undoubtedly form an integral part of this work.

2.3. Shareholder Wealth Effects

The merger and acquisition literature thus far has failed to explain why mergers continue to occur. Whilst many theories have been developed as detailed in the previous discussions, the results have not concretely explained what it is which makes firms decide to merge. When each theory has been critically assessed, shareholder gains have been shown to be confined to one market. It seems a universal story continues to remain elusive with theories finding true validity only in specific scenarios. The existing literature is unanimous in its agreement that various factors contribute to the wealth creation or destruction experienced. Before these factors are presented, the work will investigate the existing evidence pertaining to shareholder wealth effects to investigate whether firms are in fact financially motivated to merge by the potential extraction of profits.

2.3.1. Short-Term

An abundance of empirical work has attempted to discover the short-term gains to shareholders for both the acquirer and the acquired. Empirical analysis has predominantly centred on a five day window (with three-day results for robustness) surrounding the date of announcement of the deal (i.e. -2,+2 days) with investigations into share prices movements for both firms involved in the deal. Mueller (1985) neatly summarises the general consensus that '*it appears that the shareholders of acquired companies are unquestionably better off*' (Mueller, 1985: 259) while the bidding firm '*may or may not be better off*' (Mueller, 1985: 259).

Survey evidence by Jensen and Ruback (1983) briefly covers the findings of early research. In fact, their work marks the move between the investigations to discover what the returns to firms were to trying to explain how they are generated. Reviewing 13 key studies prior to 1983, they carefully examine the wider picture on the gains accrued to targets and bidders. Targets are shown to undoubtedly gain from being acquired. Overall, targets significantly gain 20% when the deal successfully completes but earn insignificant losses of -3%. Of the 13 studies reviewed, the target gain is found to range from 6.2% to 13.4% for successful merger deals while unsuccessful deals result in no significant difference at the time of announcement. As time progresses to the announcement of deal termination, the returns gradually fall backwards to their pre-offer level. The results show that while targets gain, they only do so when the control of their assets is transferred to the bidder. This is rather unsurprising if we think that targets generally enjoy a premium payment to their stock price some four weeks earlier. The results serve as warning however to target firm managers. They must carefully tread the fine line between ensuring the deal successfully completes while simultaneously getting the highest price possible for the firm, which may be achieved by a competed bid or indeed by resisting the initial offer(s). This is a difficult thing to do however and is perfectly shown in the failed attempts to acquire Southern Newspapers in 1991. Three bidders become embroiled in a bidding war and this resulted in the target price rising significantly. Each bidder eventually withdrew their offer as they believed the target shareholders had acquired unrealistic expectations over the true worth of their firm. Thus, target firm managers must tread this fine line to ensure their shareholders get a good price realised.

In the studies reviewed, Jensen and Ruback (1983) also examine the effects for the bidder. It is here which has evoked much attention since. At the date of announcement, the weighted average return is shown to be insignificantly different from zero by most studies. However Dodd (1980) is shown to find significantly negative returns for bidders at the date of announcement. There is only one significant positive result included and this shows bidders earning 3.48% at the time of deal announcement (Asquith et al., 1983). Overall however, the returns show mergers to be zero NPV investments for bidding firms. When we look towards deals which fail however, the market reaction to the termination of the deal is also shown to be mixed. If mergers are wealth maximising investments, then the market should react negatively to the deal's termination. But Dodd (1980) is shown to find positive, albeit insignificant, returns for bidders of 0.9%. However, a competing hypothesis argues that these returns can be positive if the bidder walks away from the merger so as to avoid overpayment, as was witnessed with the 1991 takeover battle for Southern Newspapers. Ruback (1983) investigated this proposition and found that if 41 bidders had have continued to match the final offer price, then they would have been undertaking negative NPV projects. In this way, managers are shown to be rational enough to walk away when the figures indicate the deal to be value destroying. And thus, positive market reactions can thus be justified in this manner.

However, these early studies face problems in their execution. Asquith, Bruner and Mullins (1983) warn that existing results may not be reliable if they do not account and control for various factors, such as relative size and merger programs. Jensen and Ruback (1983) similarly note that while targets can only be bought once, bidders can engage in a serial acquisition program. Thus, to view only one deal within this program will provide an incomplete picture for the profitability of each merger for the bidder. Bidders won't explicitly announce merger programs and hence the issue became a line of empirical investigation. Asquith, Bruner and Mullins (1983) assessed how profitable merger programs are for bidders using a sample of 156 firms spanning the period from 1963 to 1979. They presented evidence related to acquirers undertaking merger programs and assessed their first four bids. This was reasoned as the earlier bids are more likely to contain the most information. As the program continues, the market becomes aware of the bidder and thus information is supposedly more quickly compounded in to the price. Less information is revealed as more and more is known. The results show that the second bid generates the highest return for the bidder with 3.70% (t-statistic = 3.13) gains. These fall to 2.80% (t-statistic = 2.38) at the announcement of the fourth bid. Nevertheless, the gains are positive and significant, indicating that larger merger programs are beneficial for shareholders. This is supported by Franks and Harris (1989) who examine 1800 UK takeovers undertaken during the period 1955-1985 and find that on the whole, mergers have been value-creating investments for UK bidders.

While conflict over the announcement gains were found in earlier studies, and still indeed prevail today, there also became a debate over which date was the right one to use. Inevitably for researchers, there are two key dates to choose to analyse bidders or targets – the date of announcement and the date of outcome (i.e. either effective completion or termination). Jensen and Ruback (1983) recommended that the announcement date should be focussed upon as it is this date which reveals the information to the market. Thereafter, the market, if efficient, should have unveiled and incorporated all relevant information. However, others such as Asquith et al.

(1983) and Limmack (1991) argued that it is the date of outcome which is where the market truly reacts as there is confirmation of success or failure for the bidder.

Limmack (1991) used UK data for the period 1977-1986 to analyse the wealth effects for firms engaging in mergers during this time. The comprehensive study examined four key periods during mergers – the Estimation period, the Pre-Bid period, the Bid period and the long-run Post-Outcome period. In terms of the short-run gains, targets are again shown to unequivocally gain with significant announcement returns of 24%. For deals which succeed, these returns for targets are even higher sitting at over 30%. Interestingly, during the period between announcement and outcome, those targets who are successfully acquired gain 6.16%, significantly higher than those which fail to join their bidders and subsequently lose -3.29%. It seems that the market is able in this interim period to foresee the failure of the deal. Competed bids, competition regulation or negotiation difficulties may all be symptoms of the failure and are most likely to be the reason for the markets ability to foresee the deal's termination. For bidders, conflict reigns once again. In the run-up period to announcement, bidders earn significantly upward increases in their stock prices, regardless of whether or not the deal continues to succeed or fail. Larger bidders are shown to earn smaller pre-bid returns than smaller ones and this could potentially be due to information leakage. However, Limmack (1991) finds more support for the idea that bidders simply earn higher pre-bid announcement returns because they choose to undertake mergers in periods where they are performing well. Targets also gain during the three months prior to bid announcement and so the market does seem to anticipate deal announcements. At the announcement of the termination of a deal, bidders significantly lose -3.99% and this is provides support to the notion of mergers being positive investments for bidding firm shareholders.

Also assessing the impact of the deal's success or failure, Hviid and Prendergast (1993) develop a model that indicates targets gain regardless of the deal outcome. In fact, deal termination can positively impact their returns as the market receives a signal that the target is low-cost and thus this leads to a revaluation of the target firm upwards. There are three possible explanations as to why this could be the case. Firstly, if the target refuses the bid, then it reveals to the market that they believe their firm to be undervalued or indeed a better standalone operation that has previously been thought. Secondly, the threat of takeover can stir the target's management to remove any inefficiencies and this can benefit shareholders accordingly. Finally, the refusal of an offer might simply signal to the market that a rival bid may be imminent (Bradley et al., 1983).

Readdressing bidder gains in the UK, Draper and Paudyal (2006) focus on UK acquisitions for the period 1981-2001. The UK is unique in that a large proportion of the firms acquired are privately held, i.e. unlisted. Draper and Paudyal (2006) find that bidders of targets which are listed suffer no significant effect to their value, dependent upon the methodology chosen, while those which are privately held earn significant wealth gains. In addition, the authors find the returns to be dependent upon a variety of factors such as firm size, mode of payment and others. The effects of each will be explored shortly but first, a review of the findings for the long-term effects of mergers will now be conducted.

2.3.2. Long-Term

Analysing the long-term performance of mergers is confined to that of bidders as the target is incorporated into the bidder's operations past the date of completion. Disagreement over the correct methodology to truly assess a bidder's performance long-term has led to varying results once again. Early studies including Asquith (1983) and Firth (1980) find significant one year post-announcement losses for bidders. Limmack (1991) studying the UK also finds a significant downward drift to bidder's stock prices when analysing 24 month CARs from the date of effective completion. Losses vary from -14.08% when calculated using the market model to -6.87% if using the index model. When a value weighted return is computed however, the results show that there is no significant abnormal return generated and thus Limmack (1991) indicates that bidders earn zero abnormal returns. The returns seem to suggest that the market takes longer to respond to smaller bidders, and this could in part be due to information asymmetry. While the market does not reward successful bidders, it shows no sympathy for those which fail to consummate their deal with significant losses of -20.23% from the date of termination. When analysing the target's shareholders who accept equity as the method of payment, Limmack

(1991) shows that over the long-term, these individuals fail to realise any significant excess return.

Jensen and Ruback (1983) report negative returns on average of -5.5% in the twelve months following merger completion. They raise concern at these findings as they note that such results indicate market inefficiency. Perhaps the market overestimates the gains on offer, which suggest over-optimism on the half of the market, or bidders overestimate what can really be extracted invoking overconfidence on the part of the manager. Either way, the results began to invoke some early thoughts on inefficiencies within the market place. Franks, Harris and Mayer (1988) comprehensively studied the UK and US comparing acquisitions in each market over a thirty-year period from 1955 following these concerns and found abnormal returns to bidder's long term to be dependent upon the method of payment. If cash was used, then zero abnormal returns were found in both countries. When equity was employed, the work showed significantly negative returns to US bidders but not UK ones. Ruback (1988) indicated in response that it would seem after such a comprehensive sample was reviewed that such results must be accepted but a lot of work would be required to explain why inefficiencies emanate from merger activity.

To investigate whether the negative abnormal returns were simply a manifestation of poor controls for factors such as risk differences, Franks, Harris and Titman (1991) looked at the long-term performance of 399 US takeovers consummated during the period 1975-1984. Using multi-factor benchmarks to overcome concerns regarding mean-variance inefficiencies, the work finds different long-term results dependent upon the method chosen. Equally-weighted and value-weighted portfolios have significantly different returns with the former providing negative long-term returns over a 36 month period but the latter indicating positive returns. When multifactor benchmarks are used, zero abnormal returns are found for bidders over the same period. The work concludes with warnings that conclusions made are dependent upon a variety of factors such as the relative size between bidder and target, the method of payment and the methodology employed.

Furthering the debate, Agrawal, Jaffe and Mandelker (1992) study US acquisitions of bidders listed on the NYSE acquiring those on the NYSE and AMEX. They note that previous studies do not account for firm size or beta risk. They accommodate both factors into their long-term analysis. Once the relevant adjustments have been made, their work shows that for 937 mergers and 227 tender offers, bidders experience significant losses of -5% over a five year post-completion period.

Many additional studies have supported the findings of these earlier works. Loughran and Vijh (1997) provided further weight to long-run underperformance of stock-financed acquirers. Examining the five-year long-run performance of 947 US domestic acquisitions undertaken during the period 1970-1989, stock-deals generate a significant underperformance of -25% relative to a portfolio composed of matched-firms. Andrade, Mitchell and Stafford (2001) focus on the three years post-merger completion and find an overall significant loss of -5%. Once again the method of payment is found to be particularly explanatory with stock-financed deals suffering higher losses of -9% relative to cash deals which generate insignificant returns.

On the whole, methodological issues and disagreements over control variables plague the literature thus far. However, the literature can be generalised to infer that targets gain in the short-term from mergers with strong announcement and completion gains from mergers. However, these do not transpire to the long-run where it seems all gains are transferred to the bidders existing shareholders, particularly when stock is used to finance the deal. Bidders on the other hand may or may not gain in both the short and long run and it is this which still drives further research today. Many contributions can be made in explaining and documenting the apparent inefficiencies of the merger market in the face of an ever-growing volume and value of deals undertaken. Some key determinants which have been investigated thus far will now be discussed.

2.4. Known Determinants

As empirical research has progressed, much information has been revealed indicating that various influential factors affect the returns of firms in all merger activity. These factors include the relative size of bidder to target (Asquith et al., 1983; Jarrell and Poulsen, 1989; Loderer and Martin, 1990), the method of payment used to finance the deal (Myers and Majluf, 1984; Travlos, 1987; Fuller et al., 2002), the firm's size (Moeller et al., 2004; Asquith et al., 1983) and the target's listing status (Travlos, 1987; Chang, 1998; Fuller et al., 2002) amongst others. These variables will be controlled for in the empirical work undertaken in this study. A brief explanation of the literature in terms of these determinants will now be presented.

2.4.1. Relative Size

The relative size of the deal between target and bidder has been found to be influential over the impact of the merger upon the stock price of the acquiring firm. Research has shown that the higher the size of the target relative to the size of the bidder, the larger the effect that will be witnessed in the stock price of the acquirer. Asquith et al. (1983) note the need for research to address why acquirer's continue to merge when all previous evidence suggested they would effectively lose out. Examining 211 US merger deals during the period 1963-1979, the paper shows that the larger the size of the target relative to the acquirer, the larger the gains that are observed for the bidding firm. A target which is half the size of an acquirer will generate 1.8% greater returns for the acquirer than a target which is one-tenth of its size. Furthermore, these gains are heightened with the completion of the deal in question, where the acquirer is also rewarded for successfully acquiring the chosen target. Jensen and Ruback (1983) document these findings and offer that the relative size of the target can thus help explain why firms continue to merge as acquirers can gain two-fold therefore from merger activity when successfully purchasing a larger target firm.

These results are supported with a host of scholars with evidence from the likes of Jarrell and Poulsen (1989) and Loderer and Martin (1990) to name but a few. Studying the US for three decades of analysis, Jarrell and Poulsen (1989) show that increased target managerial opposition to takeovers over the time period and regulatory changes as well as the relative size of the target to the bidder have an influence over an acquirer's returns. They reason that the importance of relative size lies in the scale of the impact the acquisition can have on the bidder. At the time of announcement, the authors argue that if the target is small relative to the bidder then the acquisition may have no impact for the bidder and thus we may see insignificant returns to shareholders. Examining their empirical results, they show that the relative size of target to bidder was the highest in their first decade of analysis – that being the sixties where on average the target was 37% the size of the bidder. Overall, they support earlier findings that the larger the target relative to the acquirer, the greater the returns to be experienced by acquiring firm shareholders. This is reinforced with similar evidence from Loderer and Martin (1990) who show supportive results after the inclusion of private targets.

In a recent study, Mulherin and Boone (2000) examine the evidence for the nineties with a sample set covering 1305 firms from 59 US industries. They document two opposing theories of what mergers can mean for acquiring firm shareholders. The first they argue relates to the behavioural idea that mergers can prove to be wealth destruction on a massive scale (Moeller et al., 2005). They reason that the larger the target in this school of thought, the worse the losses that can be encountered as this can increase the size of the acquirer and lead to more managerial entrenchment. They also then show the second school of thought which is in tune with the findings of the above documented research. In this line of thinking, mergers create synergistic benefits for bidders and this is to the benefit of bidding firm shareholders who enjoy positive returns. Their evidence unquestionably supports earlier research showing positive benefits for acquirers the larger the size of the target.

Finally, Fuller et al. (2002) investigate two principal issues – how the listing status and method of payment of merger deals interact to create or destroy shareholder value. Studying 3135 takeovers using a comprehensive dataset during the period 1990-2000, they show that listing status has a significant effect over the importance of the relative size of target to bidder in terms of acquiring firm shareholder gains. While their results support earlier research, their research shows that the larger a private target is to a certain bidder, the greater the gains the shareholders of the bidder will enjoy should the bidder acquire using stock. They explain this as a result of either a liquidity effect - in which the bidder who pays using stock benefits from a discount due to the illiquidity of purchasing an unlisted target - or from benefitting via the creation of themselves as a block holder in the target when paying using stock. This is viewed as a positive creation as it is believed to invoke higher monitoring over managerial actions to avoid high pecuniary consumption levels. Whatever the root cause, their results prove that relative size indeed continues to be an explanatory variable.

Overall, the evidence is unanimous in its agreement that bidding firm shareholders benefit when acquiring a target which is larger in relative size to another. This finding has helped shed light on whether or not acquirers really can gain from merger activity.

2.4.2. Size Effect

It is not simply the relative size between bidder and target that we must account for in examination of merger deals. The firm size of the bidder is also a key explanatory factor which has been shown to generate contrastingly different results once again. The motivation to control for large firms was first examined by Agrawal, Jaffe and Mandelker (1992) who took heed of research calling for a firm's size to be accounted for when examining its long-term performance. They apply it to mergers and reason it as being due to the wide conflict over whether mergers create or destroy corporate value. In addition, it is noted that the majority of bidders are large firms and so it was thought that firm size would undoubtedly play a role in merger activity. After adjusting for both firm size and beta risk, acquirers are shown to on average suffer losses of -10% over a five-year post-merger completion period. However, the work fails to resolve whether firm size does actually play an important role in merger returns.

Recently, Moeller, Schlingemann and Stulz (2004) use a comprehensive sample of US deals over the period 1980 to 2001 consisting of private, public and subsidiary targets. A most common restriction placed on merger samples is to cut off deals with a value of less than £1 million or $1 million. This to ensure that each deal examined represents an actual change for the bidder. On an aggregate level, Moeller et al. (2004) find a 1.1% abnormal return for equally-weighted bidder announcement stock price changes. However, when the sample is split according to the size of the bidder, the results are contrastingly different. Firms larger (smaller) than the 75^{th} (25^{th}) percentile of NYSE firms each year are classified as large (small). There is a statistically significant difference between the performance of these two groups. Small firms gain $9 billion while large firms lose $312 billion from the mergers studied. When the value of the firm is accounted for, value-weighted returns show mergers to generate losses of 1.18%. The size effect, defined as small firms abnormal returns minus the abnormal returns of large firms, thus undoubtedly plays a key role in returns generated in this work. Billett and Qian (2007) additionally find further support for these findings with a negative relation between firm size and acquirer returns.

The question becomes what can explain the results found. Why would smaller firms perform better than larger ones? Demsetz and Lehn (1985) explain that small firms are fundamentally different to larger ones. Typically, smaller firms are managed and owned by few individuals. Sometimes, the manager and owner is the same thing. In accordance with Jensen and Meckling (1976), the separation of ownership and control in large firms can therefore be one of the key factors behind the performance differentials. Large firms generally have many owners and are subject to much media scrutiny. This can lead to much investor awareness of these firms. Their corporate investment decisions become highly analysed and market optimism can cause the positive announcement reaction and subsequent reversal. Behavioural finance offers many explanations in that the separation of ownership and control in larger firms can lead to the empire building theories of Jensen (1986) and the hubris of Roll (1986) to be existent within the managerial teams. Mergers then taken will cause negative returns and thus the size effect could be explained by the irrational manager-rational investor framework.

Alternative explanations are offered by Mitchell, Pulvino and Stafford (2004). Their work examines the existence of price pressure around corporate events, in particular mergers. They document the negative returns to bidders and examine the impact of short-selling around merger announcements. Investigating 2130 mergers undertaken during the period 1994 and 2000, and within the .Com bubble, the results indicate that a substantial amount of the negative reaction to stock-financed deals can be explained by the short-selling of acquirers stock around merger announcement dates. When we recall that short-selling is more pronounced for larger rather than for smaller firms, then Moeller et al. (2004) infer that merger arbitrage could also be a potential explanation for the size effect.

Investigating the various strategies on offer in light of their results, Moeller et al. (2004) find that there is no support for the overvaluation theory of mergers. However, their results are consistent with hubris and so this could be a potential explanation. Moeller et al. (2004) show that as firm size increases, bidders systematically overpay more and more with premiums rising in accordance. This therefore suggests hubris to be the most likely explanation on offer. Whatever the cause, it is clear that we must control for the size effect within this work.

2.4.3. Method of Payment

The method of investment financing was first brought to widespread attention as an explanatory variable over merger returns in work by Myers and Majluf (1984). Their work focussed on capital structure issues and the role informational asymmetry can play in terms of market reactions and managerial motives. The model presented supposes that the managers of firms hold private information regarding the value of the firm in which they are employed. The authors reason that the managerial team - which works daily within the firm and thus knows its true operations and potential better than any other - can use their private information to calculate the true value of their firm. Because of this advantage, managers can generate a better valuation than investors are able to as the latter is unaware of the inside operations of the firm. In this way, the model supposes that managers can use financing announcements as a way in which to communicate their view over whether or not their firm is misvalued in the market place. If managers believe their private information to inform them that the market has undervalued their firm, then they will choose not to issue equity in the open market. If they were to issue equity under such circumstances, then the value of the holdings for the existing shareholders of the firm would be diluted and managers would therefore not be adhering to the age-old principle of maximising shareholder wealth. Therefore, the model suggests that in such a situation, managers should choose to finance their proposed investment using cash. Equally, if the market has overvalued the firm, then managers should issue equity so as to transfer this newfound wealth to existing shareholders.

The difficulty then lies in the reception of such financing announcements to the market, particularly in attention-grabbing events, such as mergers (Barber and Odean, 2008). If investors believe this model to be true, then if managers follow its guidelines and issue equity, then investors will instantaneously be notified that the firm is overvalued and could drive the stock of the firm downwards through potential short-selling or simply cashing in on their holdings. Because of this, Myers and Majluf (1984) argue that informational asymmetry drives firms to follow a pecking-order framework in terms of financing decisions as otherwise, investors would not subscribe to a firm issuing equity before its debt capacity has been exhausted.

Following this seminal work, Travlos (1987) directly applied the idea of informational asymmetry and the power of signalling information to the market through investment financing to merger and acquisition activity. Studying the US over the period 1972 to 1981, Travlos (1987) proposed that when firms announce a merger, managers convey their beliefs over the valuation of their firm. If they are to use equity to finance the deal, following the intuition of Myers and Majluf (1984), this signals to the market that the managerial team believes their firm to be overvalued. In this instance, equity-financed merger deals therefore signal overvaluation and invoke a negative stock price reaction as the market corrects its mistake. On the other hand, while some scholars believe cash acquisitions to signal undervaluation, in effect they reveal little clear information to the market and thus should have a non-negative or insignificant effect on the bidder's stock price. Travlos (1987) finds support for these propositions and suggests that previous inconclusive results in the merger literature regarding bidders could be as a result of failing to account for the deal's method of payment. The results prove that there are significant wealth losses for stock-financed deals at the date of announcement whilst cash-financed deals earn normal returns for shareholders.

Fuller et al. (2002) in recent work furthered the conclusions held in this field by combining the method of payment for a merger with the listing status of the target. Their work confirms the importance of the method of payment in the merger literature and provides new evidence that stock financed bids do not always provide bidders with negative stock price announcements. Instead, stock-financing for the acquisition of a private target can actually generate a significantly positive stock market reaction. Principally, this is reasoned as being due to the information passed between the target and the management. At the announcement of a bid, the authors argue that the market reassesses the prospects of the bidder and does not simply react to the event itself. When the bidder announces that they will purchase a private target using equity, the market believes this will lead to a lower market premium as the target will be able to avoid the capital gains tax which would be incurred when if they accepted a cash offer. Furthermore, authors argue that the acceptance of stock in an acquisition of a private target can also lead to the creation of a block-holder in the bidding firm which is posited to lead to higher managerial monitoring and thus improved discipline of the managerial team. When this happens, shareholders of the bidding firm benefit through the alignment of managerial goals with those of the investor group.

Given this literature, the evidence is unanimous in its support that the method of payment used within mergers has explanatory power over the returns generated. Stock financing can lead to both positive and negative market reactions dependent upon the listing status of the target firm acquired, i.e. private or publicly listed firms respectively. Cash-financing on the other hand usually leads to either positive or normal rates of returns for investors. In this way, controlling for the method of payment in merger examinations is crucial and will be executed in these works.

2.4.4. Book to Market Ratio

In 1993, Fama and French warned that previous conclusions regarding the long-term abnormal performance of firms following a corporate event might be inaccurate for failing to correctly account for firm size and book to market values. They implied that the concluded finding for long-term negative underperformance of bidders in mergers may simply reflect a mistake on behalf of the researchers for failing to control for the relative book to market ratios.

Following these conjectures, Rau and Vermaelen (1998) directly examined mergers and tender offers controlling for both size and value factors. Examining stocks listed on both CRSP and Compustat from January 1980 until December 1991 involved in 3169 mergers and 348 tender offers, their work addressed three well known hypotheses. The first, commonly referred to as the Performance Extrapolation hypothesis, fits in well with Roll's (1986) ideals of hubris-infected managers. Rau and Vermaelen (1998) suggest that firms which have been doing well in the prior period(s) to the merger in essence continue to extrapolate that performance in the near future. It is almost that the momentum of the bidder from its prior upward trend continues to forge onwards as the market becomes over-optimistic over the future of the bidder. At the same time, the good past performance enjoyed by the firm leads managers to become egotistical. They believe that they are the reason for the success and almost feel invincible. As a result they undertake riskier investments for larger values, notably mergers. On the other hand, those which have not been performing well – value acquirers – generally lead managers to follow a more conservative investment policy. This leads to more prudent care being taken regarding mergers and thus supposedly leads to better merger performance.

The second hypothesis has been spoken in depth in the previous section. It relates to the method of payment used to acquire the target. If the payment used is stock (cash) then there is a negative (positive) performance exhibited in the post-merger period due to the intuition that managers will only use equity when they believe it to be at a peak, otherwise this would not be beneficial for the firm or its shareholders. Given the large number of stock options held by influential figures in firms these days, it would also more than likely damage the manager himself and thus the long-term underperformance could simply be a manifestation of this intuition.

Finally, the third hypothesis examined addresses the myopia of Earnings per Share (EPS). There has been a growing field in accountancy research investigating the effects of EPS on firm performance. The general viewpoint held is that EPS is easily manipulated by managerial teams. Mergers of firms with high EPS therefore also lead to poor performance.

The work of Rau and Vermaelen (1998) finds that in the post-merger period, value acquirers significantly earn higher returns than their glamour counterparts. For the mergers studied, value acquirers earn significant gains of 8% in the three years post-merger completion whilst those with tender offers earn up to 16%. On the other hand, glamour acquirers earn significant losses of -17% for mergers and enjoy only modest gains of 4% from tender offers. However, despite showing differences between glamour and value bidders, the predictions of Fama and French (1993) fail to gain much support. When the authors control for value and size ratios, acquirers significantly underperform equally weighted control portfolios which exhibit similar size and book to market value. Thus while the market to book value of the bidder does play a significant role over the long term the documented underperformance of mergers does not simply reflect this phenomenon.

In 2003, Sudarsanam and Mahate tested whether the findings of Rau and Vermaelen (1998) continued to hold once transferred to an alternative market. Investigating the UK market for the period 1983-1995, the work notes the long-standing ambiguity regarding whether bidders do truly gain from merger activity. Similar to Rau and Vermaelen (1998), the paper examines the pre-bid valuation of the bidder (i.e. glamour or value firms). Rather neatly, Sudarsanam and Mahate (2003) explain glamour (value) bidders to be those firms which have high (low) Price-to-Earnings (PE) or Market-to-Book value (MTBV) ratios with high (low) previous growth. Furthering on the foundations of Rau and Vermaelen (1998), the paper classifies bidders as glamour or value firms using both the MTBV ratio and the PE ratio to robustly assess whether the findings of the US hold once transferred to the UK market. Over the short-term, bidders are found to earn buy-and-hold abnormal returns of -1.4%. When extended to a period of three years post-merger completion, these losses fall to an average level of 15%. What is significant about these results is that Sudarsanam and Mahate (2003) control for both the classification method of the bidders as glamour and value but also use a variety of benchmark models to generate the long-term returns and yet still find support for the work of Rau and Vermaelen

(1998). In this way, the UK shows irrefutable evidence in favour of controlling for the MTBV of firms in empirical analysis of mergers.

2.4.5. Target Status

The listing status of firms was suggested to be an important factor to account for in merger analysis by Chang (1998) in the Journal of Finance. Following the work of Travlos in 1987, Chang argues that the signalling content of the method of payment used in merger activity is heavily dependent upon whether or not the target is a publicly listed or privately held firm.

In the same essence as Myers and Majluf (1984), Travlos (1987) suggested that managers will use equity to finance mergers only when they believe it to be overvalued. If not, then the use of equity would dilute the holdings of the existing shareholders and would not adhere to the maximization of shareholder wealth. Because of these principles, when firms use equity to purchase a target then it reveals the same information as the issuance of equity in the capital market and overall, presents a negative signal for the bidder and thus we witness a negative return for stock-finance merger deals.

However, when we account for the listing status of the target, these results are contrastingly different. While Travlos' story holds for publicly listed firms, it does not continue to do so when only privately held targets are examined. Chang (1998) presents evidence which shows that at the time of deal announcement, those bidders acquiring private targets earn zero abnormal returns when using cash while most interestingly, they earn positive and significant returns of 2.64%.

Many hypotheses have been formulated to explain the target status findings. The limited competition hypothesis (Chang, 1998) supposes that private targets garner less attention. Because of the difficulties involved in accurately pricing a privately held target, many of the gains may be bidder-specific, with much groundwork on the part of the bidder being undertaken. In this way, the hypothesis assumes that acquisitions of private targets will attract less rival bids. Thus, premia should effectively be lower without the competition evident in acquisitions of listed firms. For this reason, the hypothesis supposes that gains are achieved through in essence purchasing at a discount.

An alternative theory, commonly termed the information hypothesis (Chang, 1998), infers that for a private target to accept equity as a payment, they must have been privy to the private information and prospects of the bidder. Typically, privately held targets are composed of few owners. The loss of control in a merger is a crucial characteristic of these types of deals. This forces many to seek cash to simply get out of the firm quickly. Not only that but the loss of control once the merger has completed leads many owners of private firms to believe that without them in charge, the combined entity will not perform very well. In this light, the acceptance of equity can be taken by the market to be an indication that the target's owners must have acquired some information which suggests to them that the combined firm has a very positive future and thus the market responds well to such deals.

Finally, when the target's owners do accept equity, because privately held firms are generally owned by few people then they usually become block-holders in the newly combined firm (Draper and Paudyal, 2006). This is believed by some to give these individuals a motivation to monitor the managers of the firm to ensure that they do not indulge in pecuniary consumption, such as wasting money on plush offices and the like. This hypothesis is thus known as the monitoring hypothesis and explains the positive gains as being a result of the creation of block-holders and their incentive to monitor the managerial team.

Of the empirical evidence to date, many have been able to truly distinguish what it is which drives the positive effects for bidders of private targets. Chang (1998) finds that his results are not driven by the limited competition theory but notes the consistency of his evidence in relation to the monitoring and information dissemination hypotheses. The work highlights that the returns for acquirers of privately held targets are similar to the evidence of the creation of a block holder in the firm who has an incentive to monitor the managerial team. The sample is then split into whether or not a block holder was created by the target in equity deals. When a block holder is created by transfer of equity to the targets shareholder(s), returns to the bidder are 4.96% (t =

6.03) while this falls to 1.77% (t = 4.65) if no block holder is created, a significant difference between the two groups. Furthermore, the results are stronger for those individuals which sit on the board of the combined firm. With this evidence, Chang (1998) concludes that the results are most probably driven by the creation of an outside block holder who has an incentive to monitor the management.

Fuller et al. (2002) undertake a comprehensive US study and provide further support to the findings of Chang (1998). Their work once again shows positive (negative) returns for acquisitions of private (public) targets. Significantly, the paper shows that while these returns are impacted by the mode of payment, the returns generated are shown to be even greater the larger the target acquired. This further supports the monitoring hypothesis.

Finally, for investigations of the UK, private targets represent a huge component of merger activity. Draper and Paudyal (2006) record a figure of 80% of UK targets being privately listed. They examine a comprehensive sample of acquisitions of UK privately held targets and find that once again, positive returns are generated. In fact, the work goes so far as to argue that mergers of privately held firms certainly seem to be more aligned to shareholder wealth maximisation. With the evidence gathered, it is clear that target status plays a key role in shareholder wealth effects emerging from merger activity.

2.4.6. Unrelated/Related Targets

In the sixties, it became the fashion for firms to diversify across industries by purchasing targets from unrelated industries to their own. We witnessed a merger wave full of the creation of worldwide conglomerates. Firms such as General Electric and Berkshire Hathaway have enjoyed massive success over the years through their investments in many different industries. However, increased specialization and focus on your core business component has become largely advocated of late.

Theoretically, the desire to diversify stems from Markowitz's concept of portfolio diversification. Solnik (1974: 84) writes that the primary motivation for diversification is to reduce risk. The idea for individual investors is to hold stocks in a portfolio which are less than perfectly correlated with one another so that the unsystematic risk faced can be reduced (Watson and Head, 2007). At the firm-level, this was translated to the viewpoint that a company could diversify the risk it faced through buying other firms which operate in a different industry to itself. However, many problems emerged from this strategy and the question became whether it was good for mergers to be focussed (so that the target is in the same industry as the bidder) or diversified (where the target has unrelated operations to the bidder).

While corporate diversification was incredibly popular in the sixties, the eighties saw many corporate divestures as firms began to increase focus to their core line of business. These changes prompted many to ask whether or not firms were following the right strategy in the sixties…or the eighties. Jensen (1986) and Stulz (1990) argue that the major problem facing firms is the fact that managers do not necessarily pursue their shareholders best interests, both consciously and unconsciously. Stulz (1990) warns that managers choose the wrong firms to diversify in while Jensen (1986) argues that managers waste free cash flows by undertaking value destroying corporate investment. The desire to increase focus was examined by John and Ofek (1995). They examine the focus hypothesis which writes that if firms increase their focus and concentrate on their core business, then their performance should improve. They find support for this hypothesis. Circa 75% of all corporate divestures they study are concerned with sales of unrelated components of firms to the core line of business.

The trend towards specialization in the eighties was further supported by Comment and Jarrell (1995). Their work showed that while economics of scope were the fruits of diversification, corporate losses were incurred as incumbent managers were unable to truly ensure efficiency across all aspects of the business. Using the Herfindahl index, the authors find a negative relationship between abnormal stock returns and various diversification measures used for the period 1978-1989. This negative relation is also shown to hold between diversification and Tobin's Q in work conducted by Lang and Stulz (1994). If Tobin's Q is a measure of how well a firm is performing, then the evidence shows that firms which perform poorly are those which diversify relative to those which do not.

Campa and Kedia (2002) explore what they term the diversification discount. Empirical findings that indicated diversification destroys value are challenged in their work which models the fact that firms *choose* to diversify. They highlight the importance of the endogeneity of the decision to diversify but continue to find a strong negative correlation between the choice itself and the resultant effect on firm value. In contrast, Villalonga (2004) using the Business Information Tracking Series (BITS) in the US, finds that there is in fact a diversification premium. The paper argues that it is imperative to correctly classify industries to examine properly the diversification anomaly.

More recently, Doukas and Kan (2004) noted the dilemma facing firms and addressed the fact that many of the conglomerates in existence would actually be better placed as standalone firms in each respective field which they operate. In fact there is strong evidence which shows that conglomeration might actually reduce cash flows. Traditionally, diversification has been associated with the reduction of risk not with the reduction of returns. The concept is about holding the minimum risk for given levels of return. The authors argue that if the value of a firm is the discounted value of its future cash flows, then diversification either causes an increase in the discount rate or a fall in future cash flows which causes the fall in firm profitability today. The paper analyses related and unrelated acquisitions to test whether diversification does in fact create value. Examining 742 firm-year acquisitions completed between 1991 and 1997, unrelated acquisitions are shown to cause a greater excess fall in cash flows for bidders than those which acquire a firm in a related industry. This shows that diversification does not benefit firms as much as would be expected.

Berger and Ofek (1995) summarize the benefits and problems associated with corporate diversification programs. Increased operating efficiency, lower taxes and a greater capacity to hold debt are some of the advantages to diversifying your firm and enlarging its size. However, subsidiaries of your firm could end up draining resources from your operations. There could be disagreement between the managerial teams of each subsidiary with the parent so that the corporate vision becomes distorted. Combined, it becomes difficult to truly predict whether an unrelated acquisition will add value to your firm. Berger and Ofek (1995) examine firms between 1986 and 1991. They find that corporate diversification leads to an average loss in firm value of between 13%-15%.

Despite this overwhelming evidence, recent evidence from Graham, Lemmon and Wolf (2002) argues that much of the work pertaining to corporate diversification simply compares diversified firms with standalone firms of each component of the business to assess which performs better. They warn that this does not provide reliable evidence as the components of the firms may be systematically different. Their explorations prove their concerns to be founded and thus work may need to be furthered in this area. Nevertheless, the trend towards specialization seems to be a highly advocated course of action for bidders. In this sense, throughout this work we will expect to find a negative relation between value creation and corporate diversification.

2.4.7. Domestic vs. Foreign Targets

Acquiring a foreign target or being acquired by a foreign bidder became popular with the wave of conglomerates in the sixties. The premise to date is that cross-border acquisitions not only give the bidder entry to a new market under perhaps a known brand name (i.e. such as Kraft's 2010 acquisition of the UK confectioner Cadburys or indeed Wal-Mart's 1999 acquisition of UK superstore chain Asda) but can allow for international portfolio diversification (Wansley, Lane and Yang, 1983) either for the bidding or target firm shareholders.

Early studies focussed upon the effects for target firms. Wansley, Lane and Yang (1983) examine acquisitions of US target firms during the period January 1970 until December 1978. They analyse the market reaction to the bidder in the domestic US market and ultimately compare domestic bidders with foreign ones. The authors reason that there should be no significant difference between returns to targets from the two sets of bidders but if a differential does exist, the work argues that it should reflect potential gains from diversification. Foreign bidders are implied to wish to acquire to capitalise upon perhaps currency devaluation making foreign targets cheaper, rising costs of production forcing overseas production facilities or indeed to gain entry into another market. Taking heed of the literature which argues that both merger type and payment method have significant explanatory power over merger gains, the analysis is conducted in three samples – the overall group, groups stratified by merger type and finally, groups stratified by payment method. The results show significant positive returns for targets to be acquired by a non-US (i.e. foreign) bidder reaching 38.64% on the announcement date, with predominantly cash payment. This is significantly higher than the return to targets of domestic bidders which earn 28%. The authors take this as evidence that foreign firms pay a significantly higher premium than domestic bidders do and ultimately, this is to the benefit of the target firm shareholders. It is offered that cash is used as target firm shareholders are reluctant to accept equity from a firm listed on a foreign market which they quite possibly do not know much about. However, while many explanations are offered, the work fails to truly ascertain what drives this difference.

Dewenter (1995) furthers previous work by examining target gains from cross-border deals in two specific industries – Chemicals and Retail. She notes that while previous work has indeed found a significant premium attached to a foreign bid, there has been no intra-industry analysis to test whether bidders within the same industry exhibit the same pattern. By focussing on specific industries, the work is able to truly assess the market's reaction to the bidder using the target's abnormal return when the two bidder groups are comparable apart from their nationality. Examining the period 1978-1989, Dewenter (1995) analyses 116 deals within the Chemicals industry (81 domestic and 35 foreign) and 268 deals within the Retail industry (213 domestic and 55 foreign). The results indicate that the market's reaction to the bidder, and specifically the nationality of the bidder, is closely tied to the specific transaction characteristics. Insignificant differences on the whole are found between foreign and domestic bidders but when transaction characteristics are controlled for, i.e. merger hostility and bid competition, significant differences are found. Foreign bidders are shown to pay significantly more in hostile bids than hostile bids made by a domestic comparable, whilst foreign firms pay less when there is bid competition than domestic counterparts.

In 2004, Danbolt presents a comprehensive analysis of the issue using UK data for the period 1986-1991. 514 domestic deals are compared against 116 cross-border deals. Danbolt (2004) addresses three of the key hypotheses in this field. The first has already been touched upon and is known as the *International Portfolio Diversification* hypothesis. Investors of each firm are believed to gain through indirectly benefitting from international diversification as the firm buys/sells overseas. The premise is that managers know more than their shareholders about the potential of the firm and thus it is assumed that managers seek to maximise shareholder wealth and do so by diversifying abroad.

While the theory sounds good, Danbolt (2004) fails to find support for this proposition. The second hypothesis is termed *Market Access* and simply implies that bidders acquire overseas to avoid trade barriers in the target's nation and essentially gain access to the target's market. There is no evidence in support of this hypothesis either with firms without any previous UK operations earning insignificantly different returns to those which have. Finally, the paper also looks at the prior literature pertaining to exchange rates and the effects it can have on merger activity. For example, Danbolt (2004) refers to Deborah Swenson (1993) who undertook a study on the impact of US cross-border deals during the period 1970 to 1990. Swenson (1993) found that when the dollar was low, the number of cross-border deals, or FDI, was significantly higher.

This is supported by similar evidence from Harris and Ravenscraft (1991) who also show that US targets gain when their bidder is from a country whose currency is particularly strong against the dollar. Despite support for this hypothesis using US data, Danbolt (2004) does not find similar support for the UK and even though the returns are insignificant, there are higher gains when the sterling was strong in complete contradiction to this theory. Ultimately, Danbolt (2004) suggests that the differential performance is driven again by bid characteristics. In particular, the payment method is a key explanatory variable with foreign (domestic) bidders using significantly more cash (equity) than domestic (foreign) bidders, particularly if a loan note alternative is included in the cash offer whereby the target shareholder has the option to defer the capital gains tax.

While we can see that the target gains more when the bidder is foreign relative to a domestic counterpart, what has been found for the bidder? Eckbo and Thorburn (2000) focus on the effects for the bidder in the same scenarios. Using Canadian data, the work looks at the returns to domestic bidders (i.e. Canadian firms acquiring Canadian targets) versus foreign bidders where foreign refers to the US (i.e. US firms acquiring Canadian targets). The work notes that there are econometric difficulties faced when assessing a bidder's performance as the bidder may undertake many mergers and so the effects of one may not be reflective overall, especially if the deal is a third or fourth bid as it may have been anticipated by the market. Nevertheless, the paper analyses 1846 domestic and foreign acquisitions between 1964 and 1983. By keeping the target nation constant, the authors investigate the varying returns to the bidder when they are competing in the same market for corporate control. The work finds that while domestic bidders earn significantly positive abnormal returns around the announcement, their foreign counterparts do not. The domestic bidder gains are more pronounced when there is a great proportion of stock in the offer with the bidder who has the smallest equity size relative to the target gaining the most. In comparison, US bidders are shown on average to be eight times the size of their domestic comparable and it is surmised in the work that the insignificant returns to these bidders could in part be due to market anticipation. No significant evidence is offered in their work supporting this claim and thus it may or may not hold true.

2.5. Literary Conclusion

Mergers and Acquisitions have formed a central part of academic research over the years as researchers seek to explore why firms initiate mergers and what the consequential effects are. A blueprint for success is difficult to ascertain in part due to the ever-changing macroeconomic climate. Research in this area continues to be attractive from an interdisciplinary perspective as firms engaging in corporate restructurings need to consider legal ramifications, competition procedures, managerial theories, political landscapes, and financial performance both on domestic and international levels.

The motivations behind why one firm decides to buy another derive from a broad range of rational and behavioural intentions. The pursuit of growth and operational synergy can drive corporate restructurings when macroeconomic shocks change the prevailing landscape of an industry or economy, while sentiment-driven waves can lead to value opportunities for firms wishing to grow quickly or move from a national to international scale. Moreover, these theories all result in different long-term acquirer performance. Acquirers that purchase a publicly listed target for example lose out long-term but gain when buying a privately-held target when paying for either transactions using only stock (Travlos, 1987). However, other research indicates that acquirers neither lose nor gain from announcing and completing a M&A thus there remains uncertainty over what the future stock price evolution of acquiring companies will be post-deal completion.

With such a diverse range of motivations and profitability, unearthing when is the right time to buy/sell and what the return consequences will be continues to be a worthwhile area for research contributions. This thesis contributes to existing findings, delivering an overview of the M&A market in the UK. The UK is unique in its preference for cash payments as well as the nature of family-based ownership structures. Moreover, outside of the US, the UK remains one of the most active economies in terms of M&As undertaken. Examining the value effects for acquirers, the first empirical study explores the returns generated when firms attempt to time markets according to both firm-level and market-level valuations. The thesis then progresses to investigate the effects of capital structure changes around a M&A transaction to ascertain whether the issuance of debt or equity results in shareholder wealth maximisation. The final empirical chapter of this thesis explores sentiment in mass media coverage of acquirers undertaking M&As to ascertain if a Media Premium exists.

In 2013, the potential for an M&A wave remains potent as the world readjusts to a post-credit crunch backdrop. The sovereign debt crisis of the southern European economies coupled with the fall in emerging market returns has led to a number of value opportunities for those on the hunt to create growth with cautiously high cash balances. This thesis examines the profitability, financing decisions and media publicity of M&A transactions in the UK providing further information for future research to add to established US findings.

Chapter Three:
UK Mergers & Value Creation

The question still remains unanswered as to whether or not mergers create value. Using an intuitive methodological approach, we control for the performance of successful acquirers had their deals not have completed through the creation of a sample of deals which fail for exogenous reasons. This work examines value creation from Merger and Acquisition (M&A) activity in the UK market and finds, in strong contrast to the US, that while mergers generate short-term gains for acquirers, they do not prevail over the long-run three-year period. Behavioural finance argues that mergers create value through the use of overvalued equity to buy less overvalued target firm assets. This chapter reasons that UK mergers do not create value in this way due to the high preference for cash-payments. The significant reversal witnessed renders the question of what drives UK mergers open once again. Furthermore, in robust analysis, after controlling specifically for the valuation of the firm, market-timing in its strictest sense does not prove useful for UK acquirers due to the low use of equity-financing. Finally, the quality of mergers conducted is better when the market is valued low, most likely due to a more careful acquisition strategy being adopted. Thus it is recommended that due diligence be conducted at all times.

3. Chapter Three: UK Mergers and Value Creation

"Far more money has been lost by investors preparing for corrections, or trying to anticipate corrections, than has been lost in corrections themselves."

Peter Lynch (Fidelity's Magellan Fund Manager)

Are mergers and acquisitions wealth-maximising ventures? Whilst this topic has been explored over the years, no definitive answer has yet been concluded. Yet merger activity continues to rise year-on-year. In year-to-date figures as of September 2013, more than 24,177 deals have been announced worldwide totalling £1.56 trillion despite the economic difficulties engulfing the global markets. Analysts and investment professionals have begun to suggest that the next two years could see merger activity sore further, with the emergence of China as a willing body joining the field, as firms aim to put historically high cash balances back to work. Despite such large figures, firms remain plagued by integration difficulties, poor operations and falling stock prices post-completion. With this in mind, it becomes notable that further research remains pertinent to developing a greater understanding of corporate restructurings. This chapter provides further evidence in relation to M&A value effects by re-examining the performance of acquirers applying a new methodological approach to the UK market.

In the academic field, one undisputed conclusion has been reached regarding merger wealth generation - deals largely create significant gains for the shareholders of target firms (Jensen and Ruback, 1983; Jensen, 1988). The interest in the market for the target firm boosts its stock price in anticipation of high merger premiums. When the deal closes, this generally leads to positive significant gains for the target shareholder as the acquirer often pays more than the pre-announcement target stock price (Bugeja and Walter 1995; Crawford and Lechner 1996). However, the gains to acquiring firms are not quite so clear-cut with shareholders earning negative to zero abnormal returns from the combination (Jensen and Ruback, 1983; Mueller, 1985; Loughran and Vijh, 1997; Savor and Lu, 2009). Furthermore, most research focuses on the US market and it cannot be guaranteed that US conclusions are applicable to the wider and ever-changing global landscape.

A UK dataset is significantly different to that of most US research investigations which casts doubt over the validity of US theories when applied to alternative datasets. For instance, Franks and Harris (1989) report that UK target firms gain higher than their US counterparts. Furthermore, Faccio and Masulis (2005) document that 80.2% of deals conducted in the UK are cash-financed. And finally, Doukas and Petmezas (2007) write that 91% of UK deals involve the acquisition of a private target. Addressing these characteristics, it remains unknown as to whether US evidence for merger activity does or does not hold for the UK market. Overall, it is for these reasons that this chapter focuses on the UK.

Whether the deal conducted takes place within the US, the UK or any other worldwide market, the effects undoubtedly have a great impact on both firms involved. Undertaking a merger is a huge corporate event for the acquiring firm in particular and it is the uncertainty regarding the post-acquisition performance which can lead to varying results. The initial courting process can be long and complex, forcing managers to make a series of decisions over factors such as how to finance their deal. Post-completion, the managerial team have to integrate the new target into the culture and operations of their firm and this can be difficult to truly achieve. Because managers are aware of the uncertainty surrounding their firm, some have suggested that managers reveal information in the decisions that they make. Many signals can be sent to the market with even just the announcement of an acquisition and its terms. Primarily, the method of payment is believed to be the most powerful (see Travlos, 1987) signalling method, essentially evolving from the work of Myers and Majluf (1984). In essence, Myers and Majluf (1984) found that managers which believe their firms to be undervalued will avoid the issuance of equity at all costs. The reverse is suggested for overvalued periods. Travlos (1987) focussed their findings on to merger activity and, examining a US dataset, showed that the returns to cash acquirers display a different pattern to those which pursue their campaign using stock.

To date, many merger theories have emerged to explain why firms continue to initiate M&A's in spite of the overwhelming evidence indicating that their shareholders will effectively 'lose out'. The empirical evidence garnered largely suggests that over the long-term, cash acquisitions generate value whilst stock-acquisitions lose out due to the signalling content of the financing employed. Cash is largely associated as a zero to positive news signal within the information asymmetry literature (see Travlos, 1987; Shleifer and Vishny, 2003). Amihud *et al.* (1990) find that firms with insiders who value control prefer financing mergers using cash or debt and thus control might also play a role here. On the other hand, stock-financed deals suggest an inherent mispricing of the firm. Firm overvaluation and merger financing has led to the well-cited Market-Timing hypothesis.

Introduced by Shleifer and Vishny (2003), the market-timing hypothesis revolves around a rational manager-irrational investor framework. Here, the manager is believed to be able to rationally assess the value of his/her firm. Working inside the business, the manager is privy to information not available to those outside of the firm. And thus the decisions made can to some extent be reflective of his/her beliefs over the true value of the firm. In line with Myers and Majluf (1984), a manager will want to capitalise on the overvaluation of the firm and the market-timing hypothesis suggests that he/she does so using a merger. The merger itself is positioned as the vehicle through which managers can transfer wealth from new shareholders to their existing ones. The manager *times* the market through subjectively assessing the prospects of his/her firm. If the manager believes that his/her firms value will not rise higher than its current level and will only begin to drift down toward it's intrinsic value, then he/she capitalises on the gain through using this overvalued stock to buy a target firm. The acquisition raises the value of the acquirer through the acquisition of the targets assets using overvalued equity. Over the long-term, the acquirer's value falls towards its intrinsic level but through acquiring a target, the manager effectively raises this intrinsic level upward by the value of the targets offering. The only requirement as such is that the target must be *less overvalued* than the acquirer.

Figure 1: Market-Timing

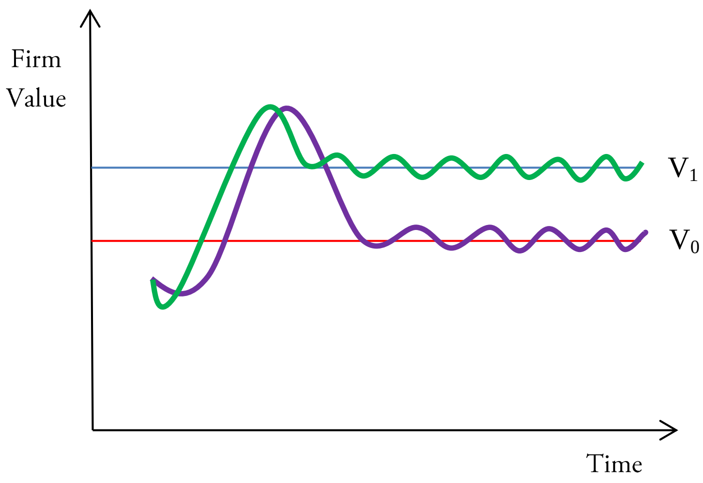

Figure 1 shows how a M&A can help cushion the collapse of the acquirers value over time. If we consider that a firm's value will fluctuate around its intrinsic level. At times, deviations can be substantial enough that the firm is statistically overvalued or undervalued. In the case of an overvalued firm, then if the value rises above the intrinsic value of V_0 then at some point in time, the market will recognise its mistake and arbitrageurs will move the price back towards its fundamental level. This is shown in the purple line above. In this case, investors that did not trade at the overvalued level would lose out as the firm value fell back down towards V_0. On the other hand, the market timing hypothesis writes that a rational manager can opportunely time a M&A during an overvalued period, raising the fundamental value of the firm from V_0 to V_1 through the addition of the target's assets. This means that although the market will correct the price downwards, it will correct it to the new value of V_1 and not V_0 thus capturing some of the rise in firm value for investors.

This chapter extends this previous literature through reassessing whether or not UK mergers create value using a comparative assessment approach. If mergers are indeed to the benefit of acquiring firms, then those deals which complete should outperform those which do not complete. This forms the basis of our work. We suggest that if mergers are in the best interests of existing shareholders, then successfully completed deals should outperform those which subsequently fail due to exogenous reasons. Notably, if successfully completed deals outperform those which fail in terms of the gains generated in both the short and long-run, then the evidence will suggest that managers are working towards their key objective of maximising shareholder wealth and mergers will be financially worthwhile for acquiring firm shareholders. Even if losses are incurred for both successfully completed deals and their failed counterparts, mergers can still be beneficial to acquiring firm shareholders so long as the losses to successfully completed deals transpire to be lower than those of deals which fail over the long-term (Savor and Lu, 2009). We further robustly check our findings with a cross-sectional analysis to assess the relationship between key variables such as method of payment.

At a superficial level a simple comparative assessment approach may, at first, appear sufficient for testing the value creation in mergers. However, there are deals which fail for endogenous reasons. If the acquirer experiences a news revelation for example, similar to the News International scandal during 2011, then the deal can fail through as a direct result. News International had every intention to acquire BSkyB but because of the media coverage of phone-hacking authorised by leading executives at the firm, the acquirer felt a direct impact within the share price of the firm. This event caused the acquirer to withdraw from the deal. In cases like this, to simply compare this deal with another one which successfully completed would produce questionable results. To solve this, we create a secondary sample of deals which fail for exogenous reasons, i.e. outside of the control of the acquirer. Using media coverage surrounding the date of failure sourced from LexisNexis, we distinguish the reason for each deal failing. Deals within the exogenous failed sample are deals which failed typically because of regulatory blocks by the Competition Commission, for example. When the acquirer had every intention to complete the deal but didn't for reasons outside of its control, then methodologically our approach is further enhanced and reliable results can be produced. For this reason, we construct two failed samples and run the analysis twice.

In addition to these primary investigations, we also recognised the offerings of the rising behavioural finance literature which argues that merger activity concerning value creation can be as a the result of managers attempting to capitalise upon favourable market misvaluations, either through the exploitation of overvalued equity as outlined by the market-timing hypothesis or through the capitalisation of the purchase of a 'cheap' target[3]. While overvaluation has been proven to be a useful determinant in the US market, much overvalued M&A activity is conducted using equity and this activity forms a key ingredient of the Market-Timing hypothesis (Shleifer and Vishny, 2003). However, Faccio and Masulis (2005) report that 80.2% of UK deals are cash-financed. This would supposedly indicate that UK firms must be undervalued 80.2% of the time, a proposition which seems unsound (Faccio and Masulis, 2005). As a secondary investigation, we are characteristically driven therefore by the UK sample set to examine the performance of acquirers which are either over or undervalued at the firm level. We conduct the same analysis as earlier to assess the worth of over or undervalued merger activity in terms of whether or not value can be created, as has been proposed and supported in the US.

Finally, upon deeper analysis of the theory, Guo et al. (2010) find that most firms conduct backward-looking market timing. That is, firms look at their past market performance and decide on their corporate strategies at times when they perceive their firm and the environment to be optimal. Not only can the level of firm misvaluation play a key role in merger activity, but the activity and valuation of the market can also influence the acquirer's performance. For example, Bouwman et al. (2009) find that mergers that take place in high-valuation periods (i.e. periods when the market is highly valued) are essentially very different to those which are undertaken in low-valuation periods (i.e. when the stock market is valued low). Thus the final examination of this chapter accounts for the valuation of the market as well.

This chapter marries together existing research fields to give a comprehensive analysis of value creation from UK merger displaying some interesting results, in strong contrast to the existing US evidence. It is found that while the successful sample of acquirers outperforms significantly in the short-run, this outperformance does not transpire to the long-run where both failed samples outperform. This indicates that over the long-term, merger activity does *not* benefit acquiring firm shareholders. In fact, the shareholders of 'successful' acquirers would have benefited more in the long-term had their deals have failed. This chapter suggests that at announcement, the UK market is potentially overoptimistic about the proposed synergies. The firms do not proceed to

[3] See Subrahmanyam (2008) for a comprehensive survey of the Behavioural Finance literature.

deliver the expected results and we witness a significant reversal of fortunes for these firms in the long-term.

In terms of firm-level misvaluation, no evidence of successful market-timing via merger activity is found. Those acquirers which finance their deals with equity do not significantly outperform those which announce to do so and fail, over the long-term period. Conversely, it is found that successful undervalued acquirers significantly outperform those undervalued acquirers which fail. In addition, the losses across the failed sample are the lowest for undervalued acquirers than for those classified as overvalued. The literature (Draper and Paudyal, 2008) reasons that undervaluation benefits shareholders twofold, both from the upward revaluation of the firm and from the synergies on offer from the merger deal. This chapter suggests that undervaluation is a stronger motive for merger activity in the UK as shareholders benefit at least from the revaluation of the firm, even if the deal fails.

Finally, when the valuation of the market is controlled for (see Fuller et al., 2002 and Petmezas, 2009) the results indicate that deals announced in high-valuation market conditions outperform those announced in low-valuation conditions in the long-term period. This can be considered as a proxy for the sentiment in the market as when the market is performing better, people within the economy tend to be optimistic about the future pushing prices today up through increased demand in the short-term. Market participants feel optimistic that they will receive the same or higher income in the future and thus consume more today. This increases the revenues for firms who then proceed to invest, with mergers as a vehicle in which to do so. When the market is highly valued and this is taking place, returns in the short-term generate significant wealth gains for acquirers. However, in the long-term, the market corrects its overreaction and moves back towards its efficient long-run equilibrium. The results in this chapter show that when that happens, a significant downward correction takes place. In fact, deals which are conducted in low-valuation market periods generate a significantly higher performance than those undertaken during high-valuation markets over a 24 and 36 month period.

Overall, this chapter contributes to the existing literature in several ways. Firstly, for the first time, the wealth effects of UK acquisition deals which succeed or fail exogenously around the announcement of the deal and the date of effective completion/withdrawal is examined. Deals that fail exogenously within the UK do so largely because of regulatory concerns regarding the market. UK M&As are subject to the Panel on Takeover and Mergers that seriously consider the combination effects upon consumer choice. Taxes can be exerted to deter activity while the Panel itself can outright reject proposed combinations by referrals made to the Competition Commission. By focussing only on these types of deals that fail, we can remove the endogeneity issues of the failed sample.

The chapter shows significant differences from established US findings. Using an innovative methodological approach, the results show that regardless of the payment method adopted, whilst successful acquirers may significantly outperform in the short-run, this does not transpire to the long-run. Furthermore, when comparatively assessing undervaluation and overvaluation as a motive for merger activity in the UK, undervaluation is found to have more substance than the market-timing story from the US. Undervaluation is shown to be more beneficial for shareholders of both successful and failed acquirers in the long-run. The mood of the market is also shown to be influential on acquirer returns with deals initiated in high-valuation markets significantly outperforming those undertaken in low-valuation markets in the short-term before a significant reversal is witnessed over the long-term.

While the evidence in this chapter refutes the existence of market-timing at the time of a merger announcement for UK acquirers, this is not to say that market-timing does not exist at all in the UK. UK firms may issue equity at times when their stock is overvalued (i.e. via an SEO) and then use the funds raised to finance a later merger with cash. The acquirer would benefit from timing the market at the firm's peak but would have the bargaining power of cash in its negotiations with the privately-held target. This forms the basis of the second empirical chapter of this thesis and follows on from the evidence gathered here.

The chapter is now organized as follows: Section 3.1 presents the existing literature pertaining to the wealth creation from merger activity as well as firm and market misvaluation evidence. Section 3.2 outlines the dataset and methodological approach employed. Section 3.3 reports the empirical results. Section 3.4 concludes the chapter.

3.1. Literature Review

3.1.1. The Wealth Effects of Mergers

Whether or not mergers create value for their shareholders has been a central research topic within the M&A research field for decades. And yet, still no definitive answer has been agreed upon in terms of the resultant effect for acquiring firm shareholders. Jensen and Ruback (1983) in their comprehensive study of merger findings in the early eighties showed that targets undoubtedly gain from merger activity. Overall, targets significantly gain 20% when the deal successfully completes but earn insignificant losses of -3%. Of the 13 studies reviewed, the target gain is found to range from 6.2% to 13.4% for successful merger deals while unsuccessful deals result in no significant difference at the time of announcement. As time progresses to the announcement of deal termination, the returns gradually fall backwards to their pre-offer level. The results show that while targets gain, they only do so when the control of their assets is successfully transferred to the acquirer.

Jensen and Ruback (1983) also examine the effects for the acquirer. It is here which has evoked much attention since. At the date of announcement, the weighted average return is shown to be insignificantly different from zero by most studies. However Dodd (1980) finds significantly negative returns for acquirers at announcement. There is only one significantly positive announcement effect for acquirers found which shows that acquirers earn 3.48% at the time of the deal's announcement (Asquith et al., 1983). Overall, the returns show mergers to be zero NPV investments for acquiring firms. Moreover, when we look towards deals which fail, the market reaction to the termination of the deal is shown to be mixed. If mergers are wealth maximising investments, then the market should react negatively to the deal's termination. But Dodd (1980) finds positive, albeit insignificant, returns for acquirers of 0.90%. However, a competing hypothesis argues that these returns can be positive if the acquirer walks away from the merger so as to avoid overpayment, as was witnessed with the 1991 takeover battle for Southern Newspapers. Ruback (1983) investigated this proposition and found that if 41 acquirers had have continued to match the final offer price, then they would have been undertaking negative NPV projects. In this way, managers are shown to be rational enough to walk away when the figures indicate the deal to be value destroying. And thus, positive market reactions can thus be justified in this manner.

However, these early studies do face problems in their execution. Asquith, Bruner and Mullins (1983) warn that existing results may not be reliable if they do not account and control for various factors, such as relative size and merger programs. Jensen and Ruback (1983) similarly note that while targets can only be bought once, acquirers can engage in a serial acquisition program. Thus, to view only one deal within this program will provide an incomplete picture for the profitability of each merger. Acquirers won't explicitly announce merger programs and hence the issue became a line of empirical investigation. Asquith, Bruner and Mullins (1983) assessed how profitable merger programs are for acquirers using a sample of 156 firms spanning the period from 1963 to 1979. They presented evidence related to acquirers undertaking merger programs and assessed their first four bids. This was reasoned as the earlier bids are more likely to contain the most information. As the program continues, the market becomes aware of the acquirer and thus information is supposedly more quickly compounded in to the price. Less information is revealed as more and more becomes known. The results show that the second bid generates the highest return for the acquirer with 3.70% (t-statistic = 3.13) gains. These fall to 2.80% (t-statistic = 2.38) at the announcement of the fourth bid. Nevertheless, the gains are positive and significant, indicating that larger merger programs are beneficial for shareholders. This is supported by Franks and Harris (1989) who examine 1800 UK takeovers undertaken during the period 1955-1985 and find that on the whole, mergers in the UK have been value-creating investments for acquiring firms.

While conflict over the announcement gains is found in earlier studies, and indeed still prevails today, a debate over which date was the right one to use also emerged. Inevitably for researchers, there are two key dates to choose to analyse acquirers or targets – the date of announcement or the date of outcome (i.e. either effective completion or termination). Jensen and Ruback (1983) recommended that the announcement date should be focussed upon as it is this date which reveals the information to the market. Thereafter, the market, if efficient, should have adjusted to and incorporated all relevant information. However, others such as Asquith et al. (1983) and Limmack (1991) argued that it is the date of outcome which is where the market truly reacts as it is then that the market receives confirmation of the success or failure for the acquirer. After this date, the market knows with certainty the fate of the acquirer regarding their merger pursuit.

Limmack (1991) used UK data for the period 1977-1986 to analyse the wealth effects for firms engaging in mergers during this time. The comprehensive study examined four key periods during mergers – the Estimation period, the Pre-Bid period, the Bid period and the long-run Post-Outcome period. In terms of the short-run gains, targets are again shown to unequivocally gain with significant announcement returns of 24%. For deals which succeed, these returns for targets are even higher sitting at over 30%. Interestingly, during the period between announcement and outcome, those targets who are successfully acquired gain 6.16%, significantly higher than those which fail to join their acquirers and subsequently lose -3.29%. It seems that the market is able in this interim period to foresee the failure of the deal. Competed bids, competition regulation or negotiation difficulties may all be symptoms of the failure and are most likely to be the reason for the markets ability to foresee the deal's termination. For acquirers, conflict reigns once again. In the run-up period to announcement, acquirers earn significantly upward increases in their stock prices, regardless of whether or not the deal continues to succeed or fail. Larger acquirers are shown to earn smaller pre-bid returns than smaller ones and this could potentially be due to information leakage. However, Limmack (1991) finds more support for the idea that acquirers simply earn higher pre-bid announcement returns because they choose to undertake deals in periods where they are performing well. Targets also gain during the three months prior to bid announcement and so the market does seem to anticipate deal announcements. At the announcement of the termination of a deal, acquirers significantly lose -3.99% and this provides support to the notion of mergers being positive investments for acquiring firm shareholders.

Also assessing the impact of the deal's success or failure, Hviid and Prendergast (1993) develop a model that indicates targets gain regardless of the deal outcome. In fact, deal termination can positively impact their returns as the market receives a signal that the target is low-cost leading to a revaluation of the target firm upwards. There are three possible explanations as to why this could be the case. Firstly, if the target refuses the bid, then it reveals to the market that they believe their firm to be undervalued or indeed a better standalone operation than has previously been thought. Secondly, the threat of a potential takeover can stir the target's management to remove any inefficiencies and this can benefit shareholders accordingly. Finally, the refusal of an offer might simply signal to the market that a rival bid may be imminent (Bradley et al., 1983).

Readdressing acquirer gains in the UK, Draper and Paudyal (2006) focus on acquisitions undertaken during the period 1981-2001. The UK is unique in that a large proportion of the firms acquired are privately held, i.e. unlisted. Draper and Paudyal (2006) find that acquirers of targets which are listed suffer no significant effect to their value, dependent upon the methodology chosen, while those which are privately held earn significant wealth gains modelled as being due to the implied shared information between target and acquirer. In addition, the authors find the returns to be dependent upon a variety of factors such as firm size, mode of payment and others.

Analysing the long-term performance of mergers is confined to that of acquirers as the target is incorporated into the acquirer's operations past the date of completion. Disagreement over the correct methodology to truly assess an acquirer's performance long-term has led to varying results once again. Early studies including Asquith et al. (1983) and Firth (1980) find significant one year post-announcement losses for acquirers. Limmack (1991) studying the UK also finds a significant downward drift to acquirer's stock prices when analysing 24 month CARs from the date of effective completion. Losses vary from -14.08% when calculated using the market model to -6.87% if using the index model. When a value weighted return is computed however, the results show that there is no significant abnormal return generated and thus Limmack (1991) indicates that acquirers earn zero abnormal returns. The returns seem to suggest that the market takes longer to respond to smaller acquirers, and this could in part be due to information asymmetry. While the market does not reward successful acquirers, it shows no sympathy for those which fail to consummate their deal with significant losses of -20.23% from the date of termination. When analysing the target's shareholders who accept equity as the method of payment, Limmack (1991) shows that over the long-term, these individuals fail to realise any significant excess return.

Jensen and Ruback (1983) report negative returns on average of -5.5% in the twelve months following merger completion. They raise concern at these findings as they note that such results indicate market inefficiency. Perhaps the market overestimates the gains on offer, which suggest over-optimism on the part of the market. Alternatively, acquirers could be guilty of overestimating what can really be extracted invoking overconfidence on the part of the manager. Either way, the results began to invoke some early thoughts on inefficiencies within the market place. Franks, Harris and Mayer (1988) comprehensively studied the UK and US comparing acquisitions in each market over a thirty-year period from 1955 following these concerns and found abnormal returns to acquirer's long term to be dependent upon the method of payment. If cash was used, then zero abnormal returns were found in both countries. When equity was employed, the work showed significantly negative returns to US acquirers but not UK ones. Ruback (1988) indicated in response that it would seem after such a comprehensive sample was reviewed that such results must be accepted but that a lot of work would be required to explain why inefficiencies do appear to emanate from merger activity.

To investigate whether the negative abnormal returns were simply a manifestation of poor controls for factors such as risk differences, Franks, Harris and Titman (1991) looked at the long-term performance of 399 US takeovers consummated during the period 1975-1984. Using multi-factor benchmarks to overcome concerns regarding mean-variance inefficiencies, the work finds different long-term results dependent upon the method chosen. Equally-weighted and value-weighted portfolios have significantly different returns with the former providing negative long-term returns over a 36 month period but the latter indicating positive returns. When multifactor benchmarks are used, zero abnormal returns are found for acquirers over the same period. The work concludes with warnings that conclusions made are dependent upon a variety of factors such as the relative size between acquirer and target, the method of payment and the methodology employed.

Furthering the debate, Agrawal, Jaffe and Mandelker (1992) study US acquisitions of acquirers listed on the NYSE acquiring those on the NYSE and AMEX. They note that previous studies do not account for firm size or beta risk. They accommodate both factors into their long-term analysis. Once the relevant adjustments have been made, their work shows that for 937 mergers and 227 tender offers, acquirers experience significant losses of -5% over a five year post-completion period.

Many additional studies have supported the findings of these earlier works. Loughran and Vijh (1997) provided further weight to long-run underperformance of stock-financed acquirers. Examining the five-year long-run performance of 947 US domestic acquisitions undertaken during the period 1970-1989, stock-deals generate a significant underperformance of -25% relative to a portfolio composed of matched-firms. Andrade, Mitchell and Stafford (2001) focus on the three years post-merger completion and find an overall significant loss of -5%. Once again the method of payment is found to be particularly explanatory with stock-financed deals suffering higher losses of -9% relative to cash deals which generate insignificant returns.

On the whole, methodological issues and disagreements over control variables plague the literature thus far. However, the literature can be generalised to infer that targets gain in the short-term from mergers with strong announcement and completion gains from mergers. But these do not transpire to the long-run where it seems all gains are transferred to the acquirers existing shareholders, particularly when stock is used to finance the deal. Acquirers on the other hand may or may not gain in both the short and long run and it is this which still drives further research today. Many contributions can be made in explaining and documenting the apparent inefficiencies of the merger market in the face of an ever-growing volume and the value of the deals undertaken.

3.1.2. The Behavioural Finance Offering

Neoclassical Finance has attempted, over the years, to analyse *'financial markets using models in which agents are rational'* (Barberis and Thaler, 2003: 1053) – that is agents which react to information arrivals in an arguably 'correct' fashion, subsequently formulating decisions in a '*normatively acceptable*' (Barberis and Thaler, 2003: 1053) way. Much financial modelling (Ackert, et al. 2003; Fama, 1965/1970) has been based on this market rationality with the Efficient Markets Hypothesis (EMH) (Fama, 1965; 1970) underwriting a lot of this research.

In recent times, the true value of this work has been brought into question. While the roots of behavioural finance can be traced back to 1896 with work from Le Bon amongst others (Sewell, 2008) the potential links between the social psychological researches of human behaviour with modern finance are vast and fresh research has aimed at combining the two fields.

In 1985, DeBondt and Thaler documented evidence of overreaction taking place within financial markets. Profits were shown to be available from shorting past winners (i.e. selling stocks which had outperformed the market) and going long past losers (i.e. buying stocks which had underperformed the market). They found that individuals within the market '*tend to overweight recent information and underweight prior (or base rate) data'* (DeBondt and Thaler, 1985: 793). Subsequent work by Jegadeesh and Titman (1993) furthered their work explaining that there appears to be an initial underreaction followed by the overreaction DeBondt and Thaler had earlier spoke about. These reactions, classified as conservatism, underreaction and overreaction, to news announcements have been identified as key heuristics of behavioural finance in which rational behaviour is undoubtedly rejected.

It has been in this environment that behavioural finance has flourished. Contrary to the beliefs of EMH supporters, behavioural finance followers posit that market participants do not always act in a fully rational way (Baker *et al.*, 2005). Behavioural finance conjectures that managers and investors alike suffer from a series of heuristics which dictate their decision-making processes, including investor sentiment (Rosen, 2006), hubris (Roll, 1986; Doukas and Petmezas, 2007), empire building (Trautwein, 1990), conservatism (Fama, 1998), overreaction/underreaction (DeBondt and Thaler, 1985; Jegadeesh and Titman, 1993; Baker et al., 2005; Gorton et al., 2005) and optimism (Baker et al., 2005) amongst others (Bogan and Just, 2008: 8). Using various heuristics as a starting platform, researchers have conducted investigations in order to investigate whether profitable strategies can be formulated to capitalise upon these irrationalities.

In the search for discovering the possibilities of behavioural finance, two strands of research have emerged – one emphasizing '*that investors are less than fully rational*' (Baker et al, 2005: i) whilst the other writes that it is managers who are *'less than fully rational'* (Baker et al, 2005: i). Although it is recognised that the opportunities lying ahead in the school of behavioural finance are endless, this chapter focusses primarily upon investors being less than fully rational through investigating the market-timing hypothesis in the UK.

Despite the fact that neoclassical finance has identified explanatory variables concerning the gains/losses accrued in M&A activity, such as method of payment (Loughran and Vijh, 1997), relative size (Kiymaz, 2004) and integration difficulties (Paine and Power, 1984; Harrigan, 1984; Schweiger, 2002), it has failed to explain just why these variables have the effects that they do. These anomalies within the literature include the fact that '*value acquirers outperform glamour acquirers*' (Petmezas, 2009: 55) and that '*small acquirers have, in general, better performance than large acquirers*' (Petmezas, 2009: 55) amongst others. It is here where behavioural finance has been employed to the benefit of M&A research.

A large body of literature has employed reactionary heuristics to look at the effects of merger announcements upon the gains/losses incurred, investigating notions such as hubris (Hietala *et al*., 2003; Doukas and Petmezas, 2007; Malmendier and Tate, 2005/2008), investor sentiment (Morck, Shleifer and Vishny, 1990; Rosen, 2006), firm overvaluation (Shleifer and Vishny, 2003; Savor and Lu, 2009; Rosen, 2006) and market-wide misvaluation (Rhodes-Kropf and Viswanathan, 2004; Rhodes-Kropf, Robinson and Viswanathan, 2005; Bouwman, Fuller and Nain, 2009) to name but a few.

For instance, Doukas and Petmezas (2007) address '*the question of whether overconfident managers act in the interests of their shareholders when they engage in mergers'* (Doukas and Petmezas, 2007: 532). They posit that overconfidence is exhibited in managers who '*underestimate (overestimate) the risks (synergy gains) associated with mergers*' (Doukas and Petmezas, 2007: 532). This manifests itself within multiple-acquisitions as the managers mistakenly classify M&A activity as being wealth-maximising for shareholders due to grossly overestimated benefits. Investigating a UK dataset, prime for such a study given that '*91% of acquisitions are associated with private targets*' (Doukas and Petmezas, 2007: 573) in which acquirers have limited information about the target's true intrinsic value, the paper shows that '*overconfident acquirers exhibit poor long-term performance*' (Doukas and Petmezas, 2007: 574) while '*high-order acquisitions are associated with significantly lower wealth effects than lower order acquisitions*' (Doukas and Petmezas, 2007: 574).

Whilst there is a vast amount of empirical literature available on the applicability of behavioural finance to M&A's (see Baker et al., 2005; Subrahmanyam, 2008), this chapter will specifically focus upon the effects of misvaluation and value creation in the UK market.

3.1.3. Market Conditions

There are notable periods in time during which merger activity has clustered. Owen (2006) lists several merger waves for the US and the UK each with its own specific characteristics and writes that there is no specific reason which can effectively explain all waves together. Instead, these waves appear to have been driven by different factors at different times, with neoclassical and behavioural motives overlapping at times.

Owen (2006) notes that the UK has been less active in terms of M&As. This is despite merger waves being in existence since the nineteenth century in the US. Most notably, the first merger wave for the UK occurred during the sixties into the seventies, where a growing global world model required the need for large corporate conglomerates to propel each economy forward. UK firms sought to rapidly increase their size to compete on the global stage. As the eighties developed however, the UK market for control of corporate assets became increasingly more competitive. With a growing economy and increasing stock prices (Owen, 2006), business confidence soared alongside profits. This abundance of cash coupled with the deregulation of the financial services industry led to an increasing number of merger deals which were characterized by hostile negotiations, high use of leverage and a vast number of buy-outs (Owen, 2006). It was in the nineties when merger activity became more sophisticated. Some of the largest deals to date were completed and following the Cadbury Report of 1992, managers were forced to increase the level of transparency of their decisions with investors.

What is interesting to note about these merger waves is that the motivating factor has changed at different times. Gugler et al. (2006) investigate in more depth what it is which drives merger activity at the aggregate level recounting the key theories on offer. Turning our attention to the neoclassical approaches first, these will often explain merger waves as the result of some kind of economic or industry shock. Harford (2005) finds particular support for neoclassical views explaining industry-wide merger waves as a direct result of economic, regulatory and/or technological shocks. The move from a wave at an industry level to a wider macroeconomic merger wave is reasoned to depend upon the level of capital liquidity available to the market at that point in time. Gugler et al. (2006) find this theory particularly hard to swallow as they perceive the simultaneous existence of some kind of shock and an appropriate level of capital liquidity as unlikely. Nevertheless, Harford (2005) produces result consistent with the industry-shocks idea.

Following the infamous merger wave of the eighties, Mitchell and Mulherin (1996) study industry-level patterns in merger activity. Their work shows that during the eighties wave, mergers undertaken were clustered disproportionately at the industry level. In particular, those industries which are most exposed to the greatest economic shocks - such as financial deregulation, technological change and so forth – saw a changing industry structure executed through merger activity. In this essence, the eighties merger wave was driven by certain industries which were exposed the most to various economic disturbances such as deregulation.

Owen (2006) favours the propositions of the economic disturbance theory favoured by Gugler et al. (2006), Harford (2005) and Mitchell and Mulherin (1991). She writes that when there is finance available and the regulatory framework encourages merger activity, then we will see a clustered period of acquisitions being conducted. Corporate restructurings, deregulation and the like are very much neoclassical trails of thought for merger waves and Owen (2006) appears to very much adhere to this philosophical school. A rising stock market is repeated throughout her work and she notes that many merger theories are centred along the idea that exogenous events can drive the decisions of firms, potentially overriding any internal concerns regarding the deal in question (Owen, 2006).

Rhodes-Kropf and Viswanathan (2004) also favour the role of the stock market as explanatory in explaining merger activity. They construct a model in which market participants are rational but errors in valuing synergies from the deal due to misinformation are correlated with an overall valuation error. The idea is that targets and acquirers both have private information about the true value of their respective companies. However, each of these values will be affected by a firm-specific error, a sector-wide error and an overall market-valuation error. In assessing whether or not to accept the acquirer's proposal, the target mistakenly overestimates the synergies on offer by underestimating the level of the market-wide valuation error. Together, this can lead to clustered merger activity during periods when the market and its sub-components are misvalued. While Rhodes-Kropf and Viswanathan (2004) refrain from sharing what it is which causes these misvaluation errors, they undoubtedly believe misvaluation drives merger activity.

Modelling an irrational stock market, Shleifer and Vishny (2003) develop the market-timing hypothesis, something to be discussed in more detail in the next section. In brevity, Shleifer and Vishny (2003) are in agreement with the conclusions of Rhodes-Kropf and Viswanathan (2004) also proposing that misvaluation drives acquisitions, but their journey takes a different path. While Rhodes-Kropf and Viswanathan (2004) posit that target firm managers unintentionally make mistakes in valuing the potential synergies on offer, Shleifer and Vishny (2003) categorically believe that these individuals knowingly work for their own utility against that of their shareholders and seek to simply 'cash-out'. Instead of working towards shareholder wealth maximisation, Shleifer and Vishny (2003) model target firm managers who wish to serve primarily their own short-term gain. However different their journey is to the same end result as Rhodes-Kropf and Viswanathan (2004), both papers fully support the idea that it is misvaluation which drives merger activity. Neither paper offers explanations as to what causes the original misvaluation to occur, but the effect of this is shown with complete conviction.

In later work, Rhodes-Kropf, Robinson and Viswanathan (2005) empirically test the predictions of the earlier models of Rhodes-Kropf and Viswanathan (2004), and Shleifer and Vishny (2003). To explore each prediction developed in the earlier models, Rhodes-Kropf, Robinson and Viswanathan (2005) decompose the market-to-book ratio of acquirers and targets into three components – a firm-specific error measuring discrepancies between the firm's market value and implied valuations, a time-series sector error reflecting the potential for sectors and markets to become overheated, and a long-run value to book which refers to the implied firm value derived from their respective long-run valuation multiples to book-value. Using this decomposed market-to-book measure, Rhodes-Kropf, Robinson and Viswanathan (2005) show empirical support for each prediction of both earlier models. Acquirers and targets are shown to share a common component of misvaluation (Rhodes-Kropf, Robinson and Viswanathan, 2005: 563) which can be problematic for firms to correctly identify the values of their own firms and the potential synergies on offer. Both acquirers and targets are shown to cluster in 'sectors with high-time series sector error' (Rhodes-Kropf, Robinson and Viswanathan, 2005: 563). More interesting results are shown when the authors evaluate these firms after stratifying for the deal's method of payment. Targets of cash offers are shown to have a negative firm-specific error inferring low-valuations, while targets of stock offers are found to be slightly overvalued. In line with market-timing, acquirers which use equity to finance their acquisition are found to be highly overvalued while those using cash are shown to be less overvalued than those using stock. In fact, highly overvalued acquirers are found to comprise a large proportion of firms acquiring during merger waves driven by misvaluation. Merger waves offer an opportunity for these firms to capitalise on their misvaluation through payment using overvalued equity in full or by using this overvalued equity as a part of their payment in mixed financing.

To robustly check their results, Rhodes-Kropf, Robinson and Viswanathan (2005) look at the Q-theory of merger waves. This theory writes that merger waves occur as an efficient response to an economic shock of some sort which causes firms to reorganize their assets. To analyse whether the results found are driven by misvaluation or Q-theory, Rhodes-Kropf, Robinson and Viswanathan (2005) assess successful deals versus those which fail. The Q-theory would expect that firm's with a larger discrepancy in their market-to-book value figures would have a higher chance of successfully completing. After stratifying their sample according to deal outcome, the empirical results show that it is failed deals that have lower misvaluation levels and a higher long-run Q. Thus the evidence seems to suggest that it is misvaluation which is a stronger driver of merger waves, not an efficient reallocation of assets.

Despite showing unequivocal support for misvaluation as a key determinant of merger activity, Rhodes-Kropf, Robinson and Viswanathan (2005) do not simply dismiss neoclassical theorems. In fact, their results show that economic, regulatory and technological shocks do play a key role in the existence of merger waves. Rhodes-Kropf, Robinson and Viswanathan (2005) suggest it is their combination with misvaluation which causes market-wide merger waves.

Very recently, Gorton et al. (2009) produce a model which explains why mergers tend to come in waves, why the stock price decreases upon the announcement of a merger for an acquirer and why mergers tend to concentrate in industries. They note that managers derive private benefits from managing a firm. In particular, the larger a firm is the more financial compensation they will receive for running it and the better additional perks will be as well. When a regime shift occurs forcing firms to acquire another because of the potential synergies on offer, then the larger the target firm is, the higher the synergies the acquirer will be able to be extract. In the race to become the biggest firm in the market, acquirers undertake a series of defensive mergers so as to avoid becoming an acquisition target themselves. However, if the manager is rational then he or she will acquire another firm in order to become more attractive as a potential takeover target themselves so as to extract the most economies of scale. But when managers work to serve their own personal interests then mergers are avoided at all costs as they fear the loss of their control and private benefits.

3.1.4. Merger Waves and Acquisition Quality

While the determinants of merger waves have garnered much academic attention and continue to do so, the quality of mergers within these waves has also warranted attention. Seminal work by Morck, Shleifer and Vishny (1990) instigated later work by Rosen (2006) and Bouwman, Fuller and Nain (2009) into the quality of mergers undertaken during periods when the market can become misvalued.

Morck, Shleifer and Vishny (1990) asked whether or not the level of investor sentiment within an economy can impact stock prices and thus influence investment decisions. Investor sentiment is modelled as the beliefs of some investors which can't be easily rationally justified. If the investor group is not unanimous in its belief for the future of the market, then overoptimistic views will simply cancel out pessimistic views and vice versa. However, if there is a correlation across the investor group with these views then this can lead to either a rise in the aggregate level of security prices given over-optimistic sentiment or a fall during pessimistic times. Following intensive empirical investigation, the work concludes that the stock market is not a complete sideshow to the investments being undertaken but it is not a driving force behind these decisions either. For financing decisions, the level of the prevailing market stock price does not lead to significantly more equity or debt issuance.

Following this work, Rosen (2006) looked at the effect of investor sentiment in terms of one particular investment – an acquisition. In this work, merger momentum is defined as the effect of the overall market reaction to recent merger activity in terms of the wider-market level and the individual acquirer's M&A strategy (Antoniou, Guo and Petmezas, 2008). Rosen (2006) argues that when sentiment is high, investors can become over optimistic. This can lead to rising stock prices which can fuel the theories of Rhodes-Kropf and Viswanathan (2004), and Shleifer and Vishny (2003) resulting in poor quality investment decisions for three proposed reasons.

Firstly, if a market shock increases the synergies on offer, then firms will be motivated to merge. When there are synergies on offer, the market rewards the acquirer thus leading to a favourable market reaction. With merger momentum, then this favourable market reaction will then lead to subsequent correlated returns to other deals resulting in a merger wave. Secondly, managerial motivations can directly impact the quality of deals undertaken. Managers can become driven by their own desires. When the market is performing well, this can lead managers to undertake acquisitions to serve their own interests. Thus this second theory infers that mergers undertaken during waves should be worse than others undertaken at different times. These first two theories both suggest that rational investors respond in the short-term period to the new information revealed at the announcement date of the deals undertaken. There should be no long-run drift witnessed in the market's reaction. The final theory directly models investor sentiment in these scenarios. If there is high sentiment then stock prices are likely to be rising in accordance with the highly valued market valued. Mergers can then become an efficient vehicle through which to capitalize upon overvalued equity prices. Managers can also become infected with sentiment and try to undertake many acquisitions believing that the wave will continue for the foreseeable future hoping to be rewarded for their investment decisions. However, over the long-term, the market will gradually correct its evaluation of these deals and we should see a reversal take place.

Rosen (2006) studies these competing theories using 6,259 acquisitions completed within the period 1982-2001 in the US market. Rosen classifies the market as 'hot' if the recent mergers conducted have generated strong announcement returns. In this way, in a hot market, investor sentiment will likely be high and overoptimistic. With this in mind, Rosen (2006) finds that firms undertaking mergers in hot markets perform no better, and possibly perform worse, than other acquirers who complete their mergers at other times. He reasons this as being due to over-optimistic beliefs within the market. When the market has been performing well, people weight this highly and there is a serial correlation in the returns of firms. Acquirers get rewarded in the short-run from acquiring a target firm in a hot market as opposed to a cold one. There is strong evidence of merger momentum within hot periods in the short-run but the quality of the deals undertaken is somewhat questionable. When analysing the long-term, a significant reversal in the fortunes of the acquirer is witnessed. Acquisitions executed in hot markets lead to long-term declines in the acquirer's share price. Overall, the paper supports both the investor sentiment and managerial motivations and concludes that there is more at work than simple economic disturbance theory in explaining acquirer returns following a merger.

Specifically assessing the quality of merger deals undertaken during high and low valuation markets, Bouwman, Fuller and Nain (2009) empirically examine the relation between market valuation and acquisition quality as discussed by Rhodes-Kropf and Viswanathan (2004), and Shleifer and Vishny (2003). Bouwman et al. (2009) classify the market as being 'hot', 'neutral' and 'cold' according to the level of the P/E of the S&P 500 index. The authors note that this P/E value has steadily risen over time and as a result they use a detrended P/E ratio. Months that are above (below) a past five year average are classified as above (below) average months. Then, the top 25% of the above-average months are classified as hot or high-valuation months while the bottom 25% of the below-average months are defined as cold or low-valuation months. Every other month is classified as neutral. The deals from their US sample are classified as hot, neutral or cold depending upon the month in which they were undertaken and the corresponding market valuation classification.

Once stratifying the sample in this way, Bouwman et al. (2009) find that the acquirer's announcement return is insignificantly negative for acquisitions undertaken in high-valuation months but significantly negative for those conducted in low-valuation months. There is a significant out performance of deals undertaken in high-valuation months versus those executed during low-valuation months. When the work examines the long-term however, the evidence indicates that there are significantly lower long-run returns for acquirers who initiated their deal in a high-valuation month versus those in a low-valuation month. The authors note that a lot of the significant wealth destruction during the nineties was largely due to acquirers using cash in hot-valuation markets. Of all cash deals within the nineties, 60% were in hot-valuation months. Thus it is suggested that cash may destroy value when used inappropriately. On the whole, the work shows that the long-term quality of deals initiated in highly-valued markets is significantly worse than those initiated in low-valuation periods.

Addressing the UK market, Petmezas (2009) studies the relationship between the valuation of the market and the impact upon an acquirer's returns. In particular, Petmezas (2009) writes that misvaluation, as modelled by Rhodes-Kropf and Viswanathan (2004) and Shleifer and Vishny (2006), suggests that it could affect merger activity in a systematic way through the ideals of investor sentiment. In high-valuation periods, acquirers should be rewarded for the new information entering the market with over-optimistic beliefs of its participants. In the long-term period, the market has the opportunity to see the true worth of the combined firm and should thus adjust the acquirer's returns downwards, correcting its earlier mistake. The results show that deals initiated in high-valuation periods earn significantly positive abnormal returns while those during low-valuation periods experience an insignificant effect. This implies that while the market rewards the new information arrival in highly-valued periods, it appears to be indifferent when the market is valued low. Over the long-term, significantly negative returns are shown for deals conducted in both high and low valuation markets. It seems likely that the market overestimates the future synergies on offer and gradually learns over time.

It can most certainly be seen that the valuation of the market is crucial to both the level of merger activity being initiated and the long-term wealth effects emanating from the quality of the deal in question. High-valuation periods foster a sense of optimism and this manifests itself in positive security prices. This can lead to overvalued firms who conduct acquisitions using overvalued equity. Similarly, when the market is valued low, targets can filter out too much of the market-wide effect so that deals appear unattractive. With this error made by targets in low-valuation periods, acquirers can earn anywhere from zero to negative abnormal returns by conducting a merger.

3.1.5. Market Timing

Rooted in behavioural finance, firm overvaluation and the development of the market-timing hypothesis has been the source of increasing academic attention since the seminal work of Shleifer & Vishny (2003). Their paper investigated possible firm misvaluation by the stock market and produced a model which explains '*who acquires whom, the choice of the medium of payment, the valuation consequences of mergers, and merger waves*' (Shleifer and Vishny, 2003: 295). The model presented is '*able to accommodate…additional evidence… (so that) transactions are driven by stock market valuations of the merging firms*' (Shleifer and Vishny, 2003: 296). Clearly, the argument pertains that the EMH fails to hold at times which results in these deviations away from the intrinsic firm value. The researchers present rational managers who recognise these divergences and set about trying to capitalise upon them. Mergers in effect become '*a form of arbitrage by rational managers operating in inefficient markets*' (Shleifer and Vishny, 2003: 296).

The market-timing hypothesis produces a range of predictions. The authors consider two firms, 0 and 1, with two respective misvaluations of Q and Q_1, with Q_1 assumed to be greater than Q. The more overvalued firm 1 is considered to acquire '*the less valuable firm 0*' (Shleifer and Vishny, 2003: 299). The several predictions of the model are as follows:

1. Acquisitions are disproportionately for stock when aggregate or industry valuations are high and for cash when they are low.

2. The volume of stock acquisition increases with the dispersion of valuations among firms.
3. Targets in cash acquisitions earn low prior returns, whereas acquirers in stock acquisitions earn high prior returns.
4. Acquirers in stock acquisitions exhibit signs of overvaluation such as earnings manipulation and insider selling.
5. Long-run returns to acquirers are likely to be negative in stock acquisitions and positive in cash acquisitions.
6. Despite negative long-run returns, acquisitions for stock serve the interest of long-term shareholders of the acquirer.
7. Acquiring a firm in another industry may yield higher long-run returns than a related acquisition.
8. Management resistance to some cash tender offers is in the interest of shareholders.
9. Managers of targets in stock acquisitions are likely to have relatively short horizons or, alternatively, get paid for agreeing to the deal.

The behavioural finance literature has quantified many of these predictions to-date. Owen (2006) details a variety of merger waves for the US and UK over the past century, each with its own characteristics. The 1960's conglomerate wave was largely governed by stock-financing with high market valuations (Dong et al., 2006; Shleifer and Vishny, 2003) whilst the hostile 1980's were undertaken during a period of low market valuations and were mainly financed using cash (Shleifer and Vishny, 2003).

The key principle of the market-timing hypothesis is that '*using overvalued shares as a means of payment enhances the claim on capital of the acquiring shareholders, and thereby cushions the collapse of the shares in the long-run*' (Shleifer and Vishny, 2003: 301). In recent times, Savor and Lu (2009) have directly tested this implication '*by creating a sample of mergers that fail for exogenous reasons*' (Savor and Lu, 2009: 1061) using a US dataset. The unsuccessful acquirers sample is then used as '*a proxy for how the successful ones would have performed had they not managed to close their transactions*' (Savor and Lu, 2009: 1063). It is found that '*unsuccessful stock acquirers underperform successful ones in an economically meaningful and statistically significant way*' (Savor and Lu, 2009: 1093), which '*increases with the length of the holding period*' (Savor and Lu, 2009: 1093). Therefore, support is found:

> '*consistent with the hypothesis that stock-financed acquirers create value for their long-term shareholders and that one mechanism by which they do so is their use of overvalued equity to purchase hard assets at an effective discount*' (Savor and Lu, 2009: 1094).

Rhodes-Kropf et al. (2005) employ the use of the market-to-book ratio in an empirical investigation of potential firm misvaluation and also find support for the predictions of Shleifer and Vishny (2003). Through a thorough investigation, Rhodes-Kropf et al. (2005) find that '*cash acquirers are less overvalued than stock acquirers*' (Rhodes-Kropf et al., 2005: 601). Evidence towards the link between M&A method of payment and market-wide valuation states is also found with particular emphasis placed on '*short-run deviations in valuation from long-run trends, especially when stock is used*' (Rhodes-Kropf et al., 2005: 601). Interestingly, it is found that '*failed transactions have larger differences than completed transactions, while successful deals display higher levels of misvaluation*' (Rhodes-Kropf et al., 2005: 601).

Whilst there is support for the market-timing hypothesis (Savor and Lu, 2009; Rhodes-Kropf et al., 2005; Dong et al., 2006), opposing theories have continually emerged with contrasting results. The importance of capital liquidity (a prominent explanatory factor for M&A waves within neoclassical finance) is highlighted as the key explanatory variable by Harford (2005) who notes that '*the relation between asset values and merger activity that is the motivation of the behavioural hypothesis reflects the capital liquidity effect rather than any misvaluation effect*' (Harford, 2005: 559). Gugler et al. (2006), testing four hypotheses of merger waves, actually conclude that '*the losses to shareholders of companies making acquisitions are greater than one expects, simply because the acquiring companies (are) overvalued*' (Gugler et al., 2006: 36) directly refuting claims that overvalued acquirers create shareholder value in the long-run.

3.1.6. Hypothesis Development

3.1.6.1. The Wealth Effects of Mergers

The survey of Jensen and Ruback (1983) invoked much academic curiosity. Their evidence indicated that while target firm shareholders earn significantly positive returns (Jensen, 1988) around the announcement date, acquiring firm shareholders do not (Mandelker, 1974; Langetieg, 1978; Asquith et al., 1983). Few studies found positive returns for the acquiring party but the majority concluded with the notion that acquiring firm shareholders were losing out from conducting mergers and acquisitions. Yet it is the acquirer who initiates the deal. In light of this evidence, research followed attempting to either refute the findings of Jensen and Ruback (1983) or indeed find evidence which helps to explain why this was the case.

Asquith, Bruner and Mullins (1983) is one study that did just that. They posed the question that if an acquirer is involved in a merger program whereby the firm in question intends to acquire many targets, then to view the effect of one merger in this sequence would invoke unreliable results. To combat this, their study examined the profitability of merger programs in the US. With a sample of 156 firms spanning the period 1963-1979, evidence was shown in support of the profitability of a merger program for an acquiring firm. The early bids in the program were shown to generate the most significantly positive returns but overall, the merger pursuit was portrayed as being a wealth-maximising venture.

The wealth effects for acquirers was also examined by Lewellen, Loderer and Rosenfeld (1984) who viewed the level of wealth destruction in relation to the percentage of the firm's ownership held by the manager. Specifically, the paper investigated the hypothesis that the smaller the level of managerial ownership of the firm, the stronger the negative impact of the merger there should be. This proposition was built upon the foundations of Jensen and Meckling (1976) and their seminal work relating to the misalignment of managerial goals with the shareholders they are entrusted to create value for. If managers own more of the firm themselves, then the alignment between the manager and his/her shareholders will mean that the same corporate goal is pursued by both parties – i.e. the maximisation of share value. Using US data for the period 1963-1981, the work finds that there is a significant and persistent positive effect between the level of managerial ownership and the returns for acquirers. Thus, if the manager holds a stronger percentage of ownership, then the wealth effects from mergers for acquirers will also be positive[4].

The wealth effects of merger activity were also shown to be influenced by the method of payment used to finance the transaction. Travlos (1987) adapted the information asymmetry modelling of Myers and Majluf (1984) applying it to corporate merger activity. Myers and Majluf (1984) suggest that a manager who believes his firm's stock price to be below its intrinsic level will avoid the issuance of equity at all costs. Otherwise, his/her firm's value would be further depressed. Travlos (1987), writing along similar lines, argues that an acquirer will not wish to use their own equity to finance a deal if they believe it to be undervalued in the market. At the same time, if the manager believes that the market has overvalued his/her firm's value, then they will attempt to capitalise on this misvaluation through the use of overvalued equity to purchase a target's assets. Travlos (1987) suggests that the choice over merger financing conveys a signal to the market regarding the manager's belief over the firm's true valuation. If he/she believes the firm to be overvalued, the deal in question will be financed using all or some equity. On the other hand, if the manager believes that the market has undervalued their firm, then the deal should be financed purely with cash. Thus the choice of merger financing reveals information to the market over the value of the acquiring firm. In this way, the announcement of equity-financed deals will signal overvaluation of the acquirer and the rational market should correct the acquirer's price downward. Equally, the announcement of a cash-acquisition will signal to the market that the acquirer is both financially secure and potentially undervalued and so we should see a positive upward movement in the acquiring firm's share value. The wealth effects to the acquirer therefore can reflect the market's correction of a potential misvaluation, signalled through the choice of merger financing.

The signalling hypothesis as proposed by Travlos (1987) has received unanimously favourable evidence. But, there has been one exception to this rule – the announcement of an acquisition of a privately-held target generates significant positive returns for the acquirer. Chang (1998)

[4] The managerial effects upon value creation emanating from merger activity have been well-covered (see Morck, Shleifer and Vishny, 1990) and are not modelled within this thesis.

investigates why this is the case and argues that it is in line with signalling but that the signals sent convey a different message to that described in Travlos (1987) for public-equity transactions. Chang (1998) reasons that private firms are typically small entities with concentrated ownership. An equity offer provides an incentive for the target's ownership to stringently assess the true value of the acquirer in relation to the market price. If the target finds that the acquirer is overvalued, it should rationally reject the equity offer. Alternatively, if the target becomes privy to information that the acquirer is undervalued or indeed has positive upcoming investments, then this will motivate its owners to accept the equity offer so that they assume a block holder position in the combined firm. In this way, the acceptance of an equity offer for a privately-held firm signals positive information to the market and thus the wealth effects are positive.

In recent times, Savor and Lu (2009) used a US dataset to examine whether firms do create value through using their equity to finance their merger deal. Their work comparatively assessed the performance of US successful acquirers versus those which exogenously fail, that is those firms which are forced to abandon their deals for regulatory purposes and the like. The empirical results show that successful acquirers that use equity to finance their deal significantly outperform those which intend to do so but fail over both a short and long-term period.

With inspiration from their approach, this chapter proposes that if mergers are initiated by the acquiring firm's management because they will be to the benefit of his/her shareholders, then those deals which succeed should outperform those which exogenously fail. This is because otherwise, mergers are not in the best interests of shareholders and thus must be as a result of some other strategic or behavioural agenda. Furthermore, there should be a significant and positive outperformance found in both the short and long term once the market has had enough time to completely adjust to the combination of the two firms. This leads to this chapter's first testable proposition as follows:

H1: If mergers are in the best interests of acquiring firm shareholders, then deals which successfully complete should outperform those which exogenously fail. This should hold in both the short and long-run.

3.1.6.2. The Valuation of the Firm

Following the work of Travlos (1987), many merger theories have emerged considering the potential misvaluation of the firm's involved in deals and the resultant influence it may have over mergers and the decisions of managers throughout the process. Seminal work from Loughran and Ritter (2000) finds supportive evidence of the effects of misvaluation upon corporate firm activity. They postulate that behavioural timing is the response to temporary market misvaluation but not the primary causation factor. In related work, Baker and Wurgler (2002) write that a firm's capital structure is the result of past attempts to time the market. Shleifer and Vishny (2003) furthered this school of thought applying it to mergers to develop the market-timing hypothesis.

As discussed earlier, the market-timing hypothesis writes that the valuation of the acquiring firm in the market drives its acquisition activity. Central to this story is the notion of the simultaneous emergence of an irrational stock market and a rational managerial team. The rational manager notes the upward misvaluation of his/her firm in the market and responds through the execution of a merger deal using the overvalued equity of the firm. The idea is that the acquirer is able to acquire a less overvalued or 'cheap' target firm and its respective assets using overvalued equity, thus ultimately at a lower price than would otherwise be possible. The only requirement for value creation is that the target is less overvalued than the acquirer. Long-term, Shleifer and Vishny (2003) propose that an acquiring firm's shareholders can gain as the merger cushions the collapse of the firm's value once the market efficiently corrects its mistake. It is assumed that the market will eventually recognise its mistake but the acquisition of the target's assets will increase the intrinsic value of the acquirer and thus the shareholders gain emanates from a reduction of losses that would have otherwise been fully endured without the deal.

Savor and Lu (2009) directly test the implications of this hypothesis within the US market. Their work intuitively designs a methodological approach to assess whether or not overvalued equity acquisitions in the short-term do indeed transpire to a reduction of long-term losses. They create a sample of deals that are abandoned for exogenous reasons. These reasons include, for example, regulatory blocks by the government over the potential creation of a monopoly post-merger announcement. After ensuring the strict criteria are met, the failed sample totals 148 deals. This is compared with a sample of 1,050 successful deals in which the acquirer manages to gain control over the target firm. Savor and Lu (2009) then comparatively assess the performance of the successful sample against that of the failed.

Focussing on the long-term performance of these two samples stratified by payment method, i.e. 100% stock-financing or 100% cash-financing, Savor and Lu (2009) present buy and hold abnormal returns (BHARs) and calendar-time portfolio returns. The results indicate that for deals that are equity-financed, the longer the time period that is assessed, the stronger the outperformance of the successful sample relative to deals which fail. In particular, there is a significant outperformance of 31.20% over a 750 day post-merger completion period. On the other hand, the work fails to find any significant outperformance for successful cash-deals over a similar long-term period. Thus supportive evidence of successful market-timing in the US is found. In this way, the use of equity when the firm is overvalued is portrayed as a wealth-enhancing decision for shareholders.

In a comprehensive study, Dittmar and Dittmar (2008) examine major corporate finance events – these being initial public offerings (IPOs), seasoned equity offerings (SEOs) and mergers. Lowry (2003), Baker and Wurgler (2000) and Rhodes-Kropf, Robinson and Viswanathan (2005) all study each respective field individually and suggest that misvaluation is a key determinant of the activity of each. Dittmar and Dittmar (2008) criticise their segmented approaches however arguing that it is necessary to comparatively assess the level of activity in each in order to understand the key forces at work. In their work, they analyse the level of stock repurchases against both equity issuance and mergers and comment that a negative relation should be witnessed. While market-timing suggests that firms capitalise on overvaluation through the issuance of overvalued stock, either for cash or to acquire a target's assets, the same logic can be applied for stock repurchases. One would assume that stock repurchases should occur, under the umbrella of market-timing, in periods when the firm is undervalued. No such evidence is found. In fact, there is a positive correlation between the activities of each of the three corporate events. When the volume of stock repurchases surges so does the issuance of equity and the level of mergers undertaken. There is a definitive cyclical pattern to the volume but from the results, it is unlikely to be driven by misvaluation. Instead, the evidence indicates that the state of the economy is a stronger driving factor. In periods of economic expansion, the volume of all three corporate events increases. It may at first seem contradictory for the issuance and repurchase of equity to occur simultaneously and in actuality, they don't occur together. What is shown by Dittmar and Dittmar (2008) is that at the start of an economic expansion, firms have limited cash but a growing desire to invest and acquire to benefit from the upward trend of the market. This motivates the issuance of equity. Later in the boom, firms have a lower level of investment opportunities and instead seek to repurchase equity. Thus while each of the three activities happens in the same economic cycle, they do so at different times. In this manner, misvaluation per se does not directly drive the decision to merge, but rather it could be free cash flow (Jensen, 1986).

From an accounting perspective, Botsari and Meeks (2008) examine mergers and the choice of payment method through investigating whether stock-financed acquirers manage their earnings prior to offering their stock for the target's assets in an equity exchange. The Earnings Management hypothesis writes in this setting that managers have an incentive to manage earnings prior to a merger in both acquiring and target firms. The acquirer in particular has a strong motivation to portray their firm as powerful and attractive as possible to ensure the target accepts the offer made. Furthermore, if earnings management could lead to an upward rise in the stock price of the firm in this period, then it suggests that managers not only time the market, but aim to also manipulate it. This could mean that overvalued equity can be exchanged for the targets assets. Botsari and Meeks (2008) use a wide range of varying approaches and find unequivocal evidence that acquirers do manage their earnings prior to an equity-offer. Thus, managers could arguably be directly attempting to manipulate their stock price before capitalising on the firm's overvaluation. In this way, stock-financing should occur when the stock price is high, potentially because of direct actions to ensure this happens.

Erickson and Wang (1999) also support "window-dressing" activities by acquirers attempting to inflate their stock price prior to a stock for stock merger. Examining the US, the sample spans 1985 to 1990 with a final sample of 55 firms. The authors argue that the higher the price of the acquirer's stock, the fewer the number of shares that need to be given to the target firm and thus the likelihood of dilution can be minimized. Their work supports earnings management, finding that acquirers do manage earnings upward prior to a merger agreement, while the degree to which firms manage earnings is shown to be positively related to the relative size of the transaction.

Louis (2004) examines earnings management in a market efficiency framework, investigating how the market processes and adjusts to manipulated accounting statements. The paper supports again the presence of earnings management with strong results to support the view that acquirers overstate earnings in the preceding quarter to which the stock for stock merger is announced. Louis (2004) indicates that financial analysts fail to fully anticipate a post-merger reversal following earnings management at announcement; however the consensus is shown to adjust by the time the following quarterly earnings are released.

The route through which firms manage earnings can also have an impact upon performance. Ge and Lennox (2011) examine whether firms deceive by commission (i.e. by over-estimating forecasts of future earnings) as opposed to deceiving by omission (i.e. by withholding relevant information that could have a negative effect on the stock price). The results indicate that it is the latter that proves most popular, with acquirers choosing to delay the delivery of bad information rather than pedalling an untrue positive story. The effects however of these papers are clear; acquirers window-dress to manipulate the price at which they pay for the target.

Focussing on the UK market, Bi and Gregory (2011) comparatively assess the Q-theory of merger activity with stock-market driven postulations (Shleifer and Vishny, 2003). They note that managers work rationally to benefit existing firm shareholders at the expense of new ones or indeed at the expense of debtholders. Traditionally, the firm's share price is low following an equity-financed acquisition (Gregory, 1997; Loughran and Vijh, 1997; Rau and Vermaelen, 1998; Agrawal and Jaffe, 2002). Thus, acquirers that use equity should do so when their stock is at an all-time peak in order to benefit existing firm shareholders. While the stock price will be low following its completion, according to the previous literature, it should be higher than it would have otherwise been without the acquisition. On the other hand, the Q-theory of mergers completely ignores firm misvaluation and writes that firms which are highly valued are so because of excellent management and the ability to invest in many positive NPV opportunities. In this light, the market values the growth opportunities of the firm and its managerial ability so that the firm can be valued highly if both are perceived by the market as being good. In this theory, firms may wish to use equity so as to preserve cash for other positive NPV ventures. Examining the UK during the period 1985-2004, Bi and Gregory (2011) find supportive evidence in favour of market-timing based explanations for stock-financed merger activity. After controlling for the relative size between acquirer and target as well as market-timing, proxies for the acquirer's overvaluation appear to increase the likelihood of the firm making an equity offer for another (Bi and Gregory, 2011: 653).

There remains controversy regarding whether or not misvaluation *causes* merger waves. As discussed, some authors argue that equity-financed mergers are simply a response to market misvaluations but are not the cause of the misvaluation in the first place. However the effects of misvaluation itself are clear. To recap, Shleifer and Vishny (2003) write that when the firm is overvalued, there is an incentive for managers to use the firm's equity to cushion the long-term downward revision to par. Savor and Lu (2009) argue that while there are low stock returns post-acquisition, these are higher than they would have otherwise been without the deal because of the addition of the target's assets. Bi and Gregory (2011) find more persuasive evidence in favour of market-timing as opposed to Q-theory. Given the literature arguing the attractiveness of using equity when it is overvalued against the vast literature which refutes its benefits, we are led to the second testable hypothesis of this chapter which proposes that:

H2: When the firm is overvalued (undervalued), it should seek to use equity (cash) in its payment method.

3.1.6.3. The Valuation of the Market

There remains today an ongoing debate over why it is that mergers cluster over time. Neoclassical theories have suggested that it is due to a shock which affects all firms within an industry. This shock can be economic, regulatory or technological and the resultant effect is that the macroeconomic conditions change enough to make the combination of firms an attractive strategy (Mitchell and Mulherin, 1996; Harford, 2005; Owen, 2006). On the other hand, behaviourists have long argued the importance of the valuation of the market (Shleifer and Vishny, 2003; Rhodes-Kropf and Viswanathan, 2004; Rhodes-Kropf, Robinson and Viswanathan, 2005). It is the validity of the valuation of the market in merger wealth creation which forms our third testable proposition.

In line with the market-timing hypothesis, mergers that are conducted when the market is valued highly have a wealth-enhancing effect due to the reduction of long-term losses as the firms within the market revert back to fundamentals (Shleifer and Vishny, 2003; Savor and Lu, 2009). Decomposing the market-to-book ratio of acquirers and targets, Rhodes-Kropf, Robinson and Viswanathan (2005) show that acquirers and targets (and thus merger activity) cluster in '*sectors with high time-series sector error*' (Rhodes-Kropf, Robinson and Viswanathan, 2005: 563). This infers that industry-wide valuation errors drive merger activity.

Furthermore, the choice of financing has also been highlighted as being governed by the valuation of the market. The use of equity is posited as being attractive when valuations are high, and less attractive when valuations are low such that cash is alternatively used instead (Shleifer and Vishny, 2003; Savor and Lu, 2009). In this way, when the market is highly valued, and thus the firms within it share a component of this misvaluation, we should see a higher proportion of equity deals as opposed to cash deals, and vice versa. This is because rational managers should aim to capitalise on the misvaluation in a way that best enhances the returns on offer for investors.

The effect of mergers upon the wealth creation for shareholders has been linked to the valuation of the market in previous literature for two major reasons – merger momentum and investor sentiment. The merger momentum hypothesis writes that deals announced in a high-valuation month should generate significantly positive returns for the acquirer. The idea is that an upward moving stock price should continue to move upward due to the momentum of the stock. Rosen (2006) argues that if a shock hits the market increasing the synergies on offer, then a favourable market reaction can be enjoyed by all acquirers within the sector which can see momentum continuing to rise upwards. This hypothesis works on a related basis to the propositions of DeBondt and Thaler (1985) suggesting that winners remain winners and losers remain losers over the short-term period. However, at some point the market corrects its mistake and share prices revert downwards so that deals conducted in high-valuation months should see long-term falls while those undertaken in low-valuation months should enjoy long-term rises.

The investor sentiment literature also argues that when the market is valued highly, this misvaluation can systematically affect the quality of deals being undertaken. Studying the UK market, Petmezas (2009) argues that in high-valuation months, when information of a merger enters the market, investing participants will reward this news with significant positive abnormal returns. This is built on the notion that when the market is valued highly, investors become over-optimistic. They seek to ride the upward trend and fail to rationally assess each merger deal. Petmezas (2009) finds support for this reasoning. There are significant positive abnormal returns for acquirers who announce their merger in a high-valuation month as opposed to those which announce during a low-valuation month.

When the market is valued highly, it is not just investors who have been argued to be at risk of over-optimism, or indeed overconfidence. Croci, Petmezas and Vagenas-Nanos (2010) examine the performance of rational versus overconfident managers in high and low-valuation markets. When the market is valued highly, Croci et al. (2010) note the work of Rosen (2006) and reason that managers can also become bullish. In these periods, managers can be guilty of overestimating the potential synergies on offer and thus significant lower-returns should be experienced. To examine this hypothesis, the authors classify managers as being either rational or overconfident according to two proxies – the Multiple Acquisitions proxy and the Stock Options proxy. They find that rational managers enjoy the highest abnormal return while deals announced in high-valuation months enjoy the most significant and positive returns on offer. In this way, the valuation of the market is shown to reap positive rewards for short-term gains when valued highly.

Examining the performance of mergers in high and low valuation periods, Bouwman, Fuller and Nain (2009) find that while there are significant gains on offer from conducting acquisitions in highly-valued months in the short-term, these are eroded over a long-term horizon. Significantly lower long-term abnormal returns are found for acquirers that undertake their merger in a high-valued month versus those undertaken in a low-valuation month. The work shows that the long-term quality of deals is lower for those conducted in high-valuation markets. This literature leads us to the final testable proposition of this chapter:

H3: In high-valuation markets, acquirers should enjoy short-term abnormal returns but these should reverse in the long-term period as the market corrects downwards so that deals conducted in low-valuation months should outperform. Furthermore, successful and failed acquirers should enjoy higher abnormal returns in high-valuation months in the short-term but should suffer lower abnormal returns over the long-term periods.

3.2. Data and Methodology

3.2.1. Data

The data utilised in this work is sourced from Thomson One Banker and Thomson DataStream. Information related to the characteristics of the deals (i.e. acquirer name, target nation, deal number, announcement date, date of effective completion/withdrawal, payment methods, deal status, deal value and target status) are taken from Thomson One Banker.

63, 967 deals were announced by UK acquirers between 01/01/1985 and 31/12/2009 of which 57,170 are flagged as succeeding and 1,388 are flagged as having been withdrawn. We restrict the samples to meet the following criteria:

- The acquirer is a publicly-listed UK firm traded on the London Stock Exchange with five days of return data around the announcement date of the deal and one to three years of return data on the DataStream database to allow for long-term analysis.
- The deal must take place between 01/01/1990 and 31/12/2009.
- The minimum deal value is £1m to control for the size effect.
- The deal must represent at least 1% of the market value of the acquirer.
- Acquirers and targets which are financial or utility firms are excluded from the sample (see Fuller et al., 2002).
- Multiple deals announced within a five day period are excluded.
- Payment-information is known (i.e. cash, stock or mixed).

The main investigation in this chapter relates to the performance of successful deals in relation to those which fail. Thus deal outcome plays a pivotal role in this study. We define a successful deal as one in which the acquirer gains control of the target – that is the acquirer completes with a holding of 51% or above post-acquisition[5]. We define a failed deal as having failed as one in which the deal is withdrawn, as flagged by Thomson One Banker. Our final sample consists of 5,240 successful deals and 223 failed deals. Figure 2 shows the number of bids in the dataset stratified by the payment method used. It can be seen that the number of cash-financed deals soar above those financed with equity in the UK market (Doukas and Petmezas, 2007; Petmezas, 2009).

[5] The acquirer is required to not have a majority holding in the target prior to the announcement of the deal.

In addition to our main overall samples, Savor and Lu (2009) explain the importance of controlling for the reason of failure for the failed sample. This chapter follows the argument of Savor and Lu (2009) and compiles an exogenous failed sample. To be included in this sample, we require that the deal fails for reasons outside of the acquirer's control. In the UK market, competition is high so the regulatory system plays an important role in governing merger activity to ensure consumer choice is not disadvantaged. 89 deals alone that failed were for these reasons. However, others fail for reasons within the control of the acquirer and to ensure the reliability of the results produced, we use data from LexisNexis surrounding the date of merger withdrawal so as to ascertain the reason for the failure of each deal. 118 deals are removed from the full failed sample according to the methodology of Savor and Lu (2009) so that we are left with an Exogenous Failed sample of 105 deals. Of these 118 deals, 33 fail because the target refuses the offer, 31 deals see the acquirer walk away following poor negotiations, 22 are found to have endured particularly difficult negotiations causing the deal to collapse, 1 fails to raise the financing desired, 6 suffer from a downgraded forecast over the acquirer's future performance and 3 have an extreme negative market reaction forcing the acquirer to withdraw. In addition, 22 are removed as we can find no reason for their failure and thus to ensure reliability, we remove these so that we are left with a second failed sample comprising of 105 deals.

The time-distribution of the full sample is shown in Table 1. The volume of deals peaks around 1998. This marked the fifth noted merger cycle to date. In the US, $1.4 trillion was spent in merger activity in this cycle (Alexandridis, Mavrovitis and Travlos, 2012). This swept to the UK where the market spent circa £1 trillion in corporate mergers and acquisitions. The deals in the successful sample of this study total £120 billion in this year. The volume of deals can be seen to remain around this level from 1997-2001. This period also marks some of the highest volume of deals which failed as well, highlighting the overall activity and competition of the market for corporate control. Post 2001, merger activity fell as the 9/11 recession hit which combined with other economic difficulties. The table shows how the volume of mergers then rose from the bear market of 2003 to a second peak in 2006 as debt-financing was plentiful. From this point onwards, given our criteria, the number of deals fell dramatically given the effects and ramifications of the global credit crunch resulting in a poor ability to raise finance for deals given the collapse of high tier investment banks.

In addition to the analysis of successful versus failed deals, the secondary analysis of this chapter looks at firm misvaluation and market-wide misvaluation. In order to identify which firms are overvalued (or undervalued), valuation changes are assessed using a twelve-month historical firm PE and a twenty-four month historical firm PE centred on the announcement month. We also additionally compute valuations based on a comparison between the firm PE and Market PE one month before announcement for robustness but report the twenty-four month historical PE ratio classifications as these are the most conservative while the results do not significantly change across categories. If the PE ratio on the announcement month or pre-announcement month is higher (lower) than the twelve-month average PE (or twenty-four month average or the Market PE), then the firm is deemed to be above (below) fundamentals. We then take the top (bottom) 30% of the above-fundamental deals and classify them as overvalued (undervalued). We use this information to construct overvalued and undervalued portfolios for short- and long-run analyses for both successful and failed acquirers.

In order to classify the market as being valued either high or low, we follow the work of Bouwman, Fuller and Nain (2009) and use a detrended market PE proxy. Given inflation and other effects, firms' PE ratios tend to drift upward over time and thus without detrending the PE ratio, the sample would see more high (low) value periods later (earlier) in the sample period. If the current month in question has a market PE ratio higher (lower) than the preceding five-year average then the month is classified as 'above-average' ('below-average'). The top 25% of the 'above-average' months (and the deals announced within these months) are classified as high-valuation while the bottom 25% of the 'below-average' months and the deals announced within these months are classified as low-valuation.

Finally, based on the extant literature, we also consider a range of standardised control variables in the cross-sectional analysis. These are explained further in the next section but include the relative size between acquirer and target (employed by Asquith *et al.*, 1983; Jensen and Ruback, 1983; Antoniou *et al.*, 2007; Kiymaz, 2004), target listing status (see Travlos, 1987; Chang, 1998; Draper and Paudyal, 2006), method of payment (see Travlos, 1987; Fishman, 1989; Linn and Switzer, 2001), acquirer size and value (see Rau and Vermaelen, 1998; Sudarsanam and Mahate, 2003), domestic/foreign targets (see Doukas and Kan, 2004) and related/unrelated targets (see Chatterjee, 1986; Morck et al., 1988).

3.2.2. Methodology

The performance of the acquiring firms is measured in terms of both the short-run and long-run abnormal return's (AR) generated by the M&A deal. The short-run analysis centres on a five-day window employing the Market Adjusted Abnormal Return approach (Seiler 2004; Brown and Warner, 1985) whilst the long-run is assessed using the Buy-and-Hold Abnormal Return (BHAR) approach favoured by Buchheim *et al.* (2001). The analyses aim to identify what the short-run market reactions are in terms of AR's generated before determining whether the short-run ARs transpire into long-run gains for the shareholder group.

The short-run analysis is conducted as an event-study with a window of five days (-2, +2) around the M&A announcement date. We calculate the normal returns[6] of the firm using daily price index data as follows:

$$R_i = \ln\left(\frac{P_t}{P_{t-1}}\right)$$

Where R_i relates to the daily normal return of stock i while P_t and refer to the stock price on day t and $t-1$ respectively.

In determining short-run AR's, we note the abundant methods available (Sharpe, 1964; Lintner, 1965; Lyon et al., 1999; Brown and Warner, 1985). Due to the restrictions of models such as the CAPM (Roll, 1977), we follow the guidelines of Seiler (2004) that AR's are defined as anything earned above the market return each day so that the expected return of a stock is assumed to be that earned by the market (Seiler, 2004: 220). This market adjusted AR approach is in line with

[6] The results were robustly analysed using an arithmetic return as well. They remain unchanged.

Brown and Warner (1980) so that AR's are the excess stock return adjusted for the market over the sample period (Buchheim *et al.*, 2001: 22). With this in mind, the normal returns of the stock (R_i) must have the normal market return[7] (R_m) deducted in order to generate the AR on each of the five day's as follows:

$$AR_i = R_i - R_m$$

Where $R_m = \ln\left(\frac{P_t}{P_{t-1}}\right)$. R_m is the normal market return calculated using the daily price of the FTSE Allshare over the sample period. The AR's are summated to give the cumulative AR (CAR) as follows:

$$CAR_i = \sum_{i=0}^{n} AR_i$$

Given the role the market is posited to play in potential firm misvaluation, we believe this model to be particularly appropriate in determining the AR's to be analysed through allowing for us to see whether stock returns move in line with the ups and downs of the market.

Short-Run univariate analysis will involve the above process for each portfolio of M&A deals. Their characteristics will be analysed in terms of the descriptive statistics based on the portfolio CARs before we compute the portfolio t-value, and following Seiler (2004), the T-statistics are computed using the formula:

$$t = \frac{AR_T}{\sigma(AR_T)/\sqrt{n}}$$

Where AR_T refers to the sample mean, and $\sigma(AR_T)$ is the cross-sectional sample standard deviation for the sample of *n* firms.

In assessing the acquirer's long-run performance, Fama (1998) claims that different methodological approaches produce different results for long-run AR's so that testing in effect becomes a one over the choice of econometric model rather than a direct test of the study at

[7] The results do not change when the benchmark return is varied using the CAPM or market model.

hand. He further stresses that the assessment of various events with different models is noted often to eradicate the existence of an anomaly. As a consequence, choosing the correct model is therefore imperative.

To combat problems associated with long-run analysis and the noted bad-model problem (Fama, 1998), we intended to employ the use of two well-known long-term approaches, the BHAR approach and the Calendar-Time Portfolio approach (CTPA). However, upon implementation of the CTPA, we encountered a number of problems with the failed sample due to its smaller size while there were no such problems for the Successful sample. With this in mind, there was a question over our ability to reliably compare such sample results given the different periods assessed. In this way, the discussion of long-run acquirer performance will be analysed in terms of the BHAR approach.

As pointed out by Buchheim *et al* (2001: 28), the BHAR approach employed measures the difference between the compounded actual return and the compound predicted return, and is calculated as follows:

$$\mathrm{BHAR_{it}} = \prod_{t=0}^{T}[1 + \mathrm{R_{it}}] - \prod_{t=0}^{T}[1 + \mathrm{R_{mt}}]$$

where R_{it} and R_{mt} are the arithmetic returns including dividends on security i and the FTSE Allshare value-weighted index respectively at time t. The results are mainly discussed for a thirty-six month holding period but we also compute twelve- and twenty-four month BHARs which serve to confirm our results and are provided at the end of this chapter.

The BHAR approach itself is well-used within recent literature and is the advocated method for long-term return analysis proposed by Lyon et al. (1999). They indicate that it provides an accurate measure of the AR's experienced by an investor. However, Fama (1998) argues that long-run BHARs suffer from compounding expected-return's and their associated problems from short-run analysis. Furthermore, BHARs can produce a statistically significant result even when none is present due to the effect of short-run movements (Buchheim *et al.*, 2001: 28). The possible positive skewness problem can yield potentially misleading results and thus may cast doubt over the efficiency of the output generated from statistical analysis.

Therefore, we conduct a robustness check for our results calculating a Bootstrapped T-Statistic also. This statistical method has gained prominence within the literature as research began to criticise the potential skewed-distribution problem of the BHAR approach (Barber and Lyon, 1997)[8]. BHARs do accurately reflect the effect of a particular corporate event upon the investor and their holdings (Buchheim *et al.*, 2001: 28) and it is for this reason that they are utilized for assessing the robustness of the long-run performance of UK acquirers.

In order to ensure the reliability of the results produced, robustness checks for the short and long-run event window are also conducted. The short-run window is shortened from five-days to three-days to further assess the impact the M&A announcement has upon the gains created. The 5-day CARs results are reported and we also find that 3-day CARs are very similar. Finally, the long-run window is shortened from 36-months to 24 and 12 months. We find that the results largely support our main findings although some coefficients lose their significance.

In addition to the short-run and long-run univariate analyses, a cross-sectional analysis is conducted to examine the causation factors explaining the reactions of the market reflected in the acquiring firm's share prices. As criticised by Draper and Paudyal (2008), univariate analysis fails to allow for the interaction of alternative variables upon acquirer gains, and consequently we extend our analysis to model such interactions. The 5-day CARs and 36-month BHARs at both DA and DO are investigated in the following cross-sectional framework:

$$5\ Day\ CAR\ DA/DO\ or\ 36\ Month\ BHAR\ DA/DO = \alpha + \sum_{i=1}^{N} \beta_i X_i + \varepsilon_i$$

In model (6), the constant α reflects '*everything after controlling for the effects of all the explanatory variables'* (Draper and Paudyal, 2008: 395). In this setting, we include a vector of explanatory

[8] We report normal t-statistics but bootstrapped statistics are available upon request.

variables in $\boldsymbol{X_i}$ including the deal outcome, firm misvaluation and market-valuation primary variables alongside various control factors. The leading variables include a Successful dummy which takes the value of 1 if the deal is successfully completed as defined earlier (0 for deal failure); an Overvalued dummy which takes the value of 1 if the acquirer is classified as overvalued[9]; an Undervalued dummy which takes the value of 1 if the acquirer is classified as undervalued[10]; High-Valuation takes the value of 1 if the deal was announced in a high valuation month; and Low-Valuation takes the value of 1 if the deal was announced in a low-valuation month.

Our control variables include the following: Cash takes the value of 1 with 100% cash-financing; Stock takes the value of 1 with 100% equity-financing; Unrelated Target takes the value of 1 if the target is in a different industry to the acquirer as measured using the Primary SIC codes[11] of the acquirer and target; and Foreign Target takes the value of 1 if the target was from the UK. Additionally we also control for value and size effects using the MTBV of the acquirer one month prior to deal announcement as well as the logarithm of the acquirer's Market Value one month prior to deal announcement. We conduct a variety of combinations and these are discussed later in this work. In addition, we use STATA to produce robust t-statistics to control for potential homoscedasticity. The analysis also controls for the possible interaction effects between various terms and these prove to be consistent with our findings.

3.2.3. Summary Statistics

Table 2 depicts the summary statistics for successful and failed acquirers – F(A) refers to the full failed sample comprising of 223 deals while F(E) refers to the exogenous failed sample which is composed of 105 deals. For successful acquirers we see an average market capitalisation of £311m. For failed deals, the acquirers are much larger with an average market value of £1164m.

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[9] This takes the value of 1 if the acquirer is deemed to be overvalued using a historical 24-month PE ratio as outlined earlier in this section.

[10] This takes the value of 1 if the acquirer is deemed to be undervalued using a historical 24-month PE ratio as outlined earlier in this section.

[11] The sample was split according to whether the deal was diversifying or not, as measured twice; firstly using the four digit Primary SIC and secondly using the two digit Primary SIC code. The results report the findings from the two digit Primary SIC code stratification.

This is slightly more for those in the F(E) sample where the average market value rests at £1456m. Most notably, the MTBV's for successful acquirers are larger than failed ones, which implies that successful acquirers may be more overvalued than their failed counterparts. Indeed it may also infer that the market is more optimistic regarding successful acquirers and therefore more favourably values these firms.

The statistics show that there are more deals undertaken in high-valuation months than in months that are valued low. The literature suggests that the market is more receptive to the announcement of mergers during high-value periods when investor sentiment is high. In this way, it is attractive for firms to announce deals of which they are uncertain over its success in these market conditions so as to benefit from the higher market optimism. There also appears to be a large majority of Successful deals completed using cash being undertaken in these months with Failed deals additionally also having slightly more cash-deals than stock. Therefore, the table also provides supportive evidence for Faccio and Masulis (2005) and Doukas and Petmezas (2007) showing that the majority of UK deals are financed using cash. However, cash deals do have a slightly lower MTBV of 2.47 for the method of payment portfolios when compared with stock of 2.54. The t-statistics for the two group test is -0.77 which suggests that valuation does not play a major role in the choice of deal-financing.

We can see that on average for private targets, Successful acquirers are 61.28% of the size of their counterparts conducting public acquisitions. For Failed deals, private acquirers are 89.45% the size of public acquirers. Whilst private targets are smaller relative to the acquirer in Successful deals compared to public targets, this does not hold in failed deals where public targets are smaller. The table also implies that relative size may be a potential proxy in determining the success or failure of a given deal as the market value of Failed deals is some 2.5 to 3.5 times larger than that of successful ones despite the categories of their targets.

Additionally, the table shows that the majority of UK deals involve the acquisition, or attempted acquisition, of a UK target with more deals classified as Domestic than Foreign. Furthermore, there is a majority of Glamour acquirers in the samples and this may impact on the long-run performance. Not surprisingly, we see a much larger time interval in deals which are subsequently withdrawn (120 days) as compared with those that succeed (21 days). Furthermore, this increases to 132 days for the exogenous failed sample. Failed deals could fail for a number of reasons such as changed regulation, competing offers, falling valuations, repellent strategies amongst others. It could be the case that the longer a deal is taking to complete, the stronger the indication that the deal may fail or be blocked. The figures show that failed deals are attempting to acquire a public target. Public targets tend to be larger firms, subject to stronger regulation and market control. The acquisition of a public target requires the shareholders (which tend to be a larger group) to agree to the deal. This, coupled with the presence of competitive bids from rival firms, may help explain the reason for deal failure.

3.3. Empirical Findings

3.3.1. Short-Term Analysis

Earlier in this work, it was argued that successful acquirers should significantly outperform those which announce an intention to acquire but fail to do so, particularly when the use of equity is involved. This is built upon the empirical foundations of Shleifer and Vishny (2003) and Savor and Lu (2009). Furthermore, once any endogeneity issues with regards to the failed sample have been addressed, the results should more clearly show a significant outperformance if the merger activity does indeed benefit the shareholders involved.

Table 3 presents the results for the short-run five-day CARs around both the date of announcement and date of deal outcome. In Panel A, the full combined sample returns (successful deals plus the full failed sample) are shown, stratified by the deal's method of payment. When the deal is financed using 100% cash (stock) then it is in the cash (stock) sample, otherwise the remaining deals paid for using both equity and cash are placed in the mixed sample. Travlos (1987), amongst others, write that the intended use of stock in an acquisition signals to the market that the acquiring firm is overvalued. This is because if it were not overvalued, then the use of stock is an irrational act on the part of the managerial team. This is further supported within the market-timing hypothesis developed by Shleifer and Vishny (2003) and seen within the work of Savor and Lu (2009), which writes that acquisitions provide a vehicle for managers to cushion losses as the firm's overpriced stock reverts to its intrinsic lower value through the addition of the target's assets, raising the fundamental value of the acquiring firm.

Panel A of Table 3 shows that on average, acquirers earn 1.00% (p value = 0.000) significantly positive abnormal returns at the date of announcement while these are complemented with a further 0.68% (0.000) upon the outcome of the deal. For those acquirers that finance their deal using cash, significant and positive abnormal returns are enjoyed. At the date of announcement cash acquirers earn 1.27% (0.000) whilst also earning 0.89% (0.000) at the date of outcome. The mixed financing sample also earns significantly positive announcement and outcome returns of 0.92% (0.000) and 0.63% (0.000) respectively. However, for the stock-financed sample, no significant announcement or outcome effect is found. There are only 250 deals financed purely with equity for both samples and this shows the apparent dislike for equity financing in the UK market. Its use does not provide a significant negative effect in the short-run as predicted and has been experienced by firms in the US market. Instead, acquirers and targets predominantly favour cash where significant gains can be earned.

In Panel B, acquirers which successful complete their deals are presented and the results from Panel A are supported. This is not surprising as the successful sample comprises the majority of the deals modelled in Panel A. The Failed sample and its sub-sample of deals which fail for exogenous reasons are shown in Panel's C and D respectively. Within this work, the failed sample acts as a control for the performance of successful acquirers. The focus is on whether or not successful mergers create value for their shareholders. This is assessed by whether or not successful acquirers significantly outperform those which fail, and furthermore, those which fail for exogenous reasons. Thus the discussion moves to Panel's E and F which displays this differential information. The results indicate that in the short-term period, acquirers which succeed significantly outperform those which do not at both the date of announcement and date of deal outcome. At the date of announcement, successful acquirers earn 1.39% (0.000) more than those which fail. This is even more pronounced at the date of outcome where this outperformance rises to 1.41% (0.000). These results show that acquirers in the UK, on average, do significantly create short-term value.

When these samples are stratified according to the deal's method of payment, the results indicate that cash acquirers also significantly create value. At the date of announcement those firms which successful complete their deals using only cash earn 2.14% (0.005) significantly more than those which intended to complete their respective deals under the same terms, and this outperformance is complemented by marginally significant returns of 1.20% (0.105). Despite the significant outperformance of cash acquirers, those which finance their deals using stock fail to generate any significant outperformance. In fact, there is an insignificant difference between successful and failed acquirers in this short-run analysis for stock acquirers. This finding refutes that of Savor and Lu (2009) as they show that stock-financed acquirers do significantly create value through a significant outperformance of the successful sample relative to the failed. The UK evidence shows no support for this finding or indeed therefore for the market-timing hypothesis, the premise behind Savor and Lu's work.

When the failed sample is purified by the nature of its collapse, the superiority of the successful sample can be viewed even more clearly. Panel F displays the results and it can be seen that successful acquirers significantly create 1.70% (0.001) value through the completion of their deal. At the date of outcome when the market knows with certainty that the deal has successfully completed, acquirers create further significant value of 1.17% (0.082). These results are supported within the cash acquirer sample with acquirers significantly creating value through successful completion with returns of 1.51% (0.007) at the announcement date and 1.77% (0.006) at the date of completion. However, despite the purification of the failed sample, there is no difference for the stock-differentials. It remains true that successful acquirers have an insignificant effect on their stock prices through completing their deal with stock as opposed to if it had have collapsed. Thus, there is no evidence of successful market timing in Table 3.

For robustness, this analysis is repeated using a three-day event window instead. The results of this analysis are presented in Table 4. For brevity, the results are not further discussed but it is noted that the above discussion continues to hold.

The second stage of analysis for value creation in the UK market is to categorise the valuation of the acquirer. Instead of relying on the implied view that acquirers *should* only use equity when it is overvalued, the analysis classifies acquirers according to whether or not their PE value is at an overvalued and undervalued figure, based on a historical average[12]. The results of the short-term analysis focussed upon the returns emanating from firm misvaluation centred on a five-day window are presented in Table 5.

Panel A of Table 5 presents the results for the overvalued and undervalued acquiring samples, as well as the differentials between the two. Overall, there are 1,938 acquirers classified as overvalued while 2,404 are undervalued. Overvalued acquirers earn significantly positive gains of 0.69% (0.000) at the date of announcement while the market further rewards these firms with significant gains of 0.45% (0.000) when the deal outcome is known with certainty. Despite these significant returns, the results indicate that they are significantly lower than those earned by undervalued acquirers. In fact, undervalued acquirers earn 0.57% (0.001) more than overvalued ones at the date of announcement and 0.56% (0.000) more at the date of deal outcome. Draper and Paudyal (2008) write that undervalued acquirers can benefit twofold from announcing mergers when their stock price is valued low. They reason that the attention placed on the firm from the market when the merger deal is announced forces a quicker correction in the stock price. The deal either reveals positive information, which is rewarded by the market, or the attention attracted simply forces an efficient upward stock price correction. Either way, the results indicate that undervalued acquirers significantly earn positive returns when announcing a merger, above and beyond those extracted by overvalued ones.

Once again, stratifying by method of payment shows significant gains for cash acquirers. Furthermore, undervalued cash acquirers earn significantly more than those firms that use cash

[12] For robustness, the analysis also classified acquirers as misvalued using MTBV and comparisons to Market PE and Industry PE figures in select cases and the results remained true and thus for brevity they are not presented.

when their stock price is overpriced. At the date of announcement, undervalued cash acquirers significantly earn 0.55% (0.044) more than overvalued cash acquirers while this differential rises to 0.86% (0.001) at the date of deal outcome. However, there is once again an insignificant effect for stock-financed deals. Not only are there insignificant returns for both overvalued and undervalued stock financed acquirers but the differential is also insignificantly different from zero. Once again, this reaffirms the earlier finding refuting market-timing within the UK at the time of the merger announcement.

Once again, Panel B presents the results for the successful sample. Significant returns are earned by both successful overvalued and undervalued acquirers at both the date of announcement and date of outcome for the overall sample as well as for the method of payment sub-samples cash and mixed. Undervalued acquirers are shown to once again create significantly more value than those firms that are overvalued, through announcing a merger deal and successfully completing it. There is a significant outperformance of undervalued acquirers that succeed at the date of announcement of 0.64% (0.000) and the date of outcome of 0.62% (0.000). This is also true for the cash and mixed samples.

Panel's C and D present the results for the control samples comprising of deals that failed while the differentials are presented in Panel's E and F. The results indicate that overvaluation generally does not create any value within the UK market. This is not surprising given that the main route for value creation from an overpriced stock value is to use overvalued equity to buy a less overvalued target in order to cushion the long-term collapse of the acquirers share price. No significant results have been found for the stock-financed sample while the number of deals using stock is very low anyway within the UK market. Faccio and Masulis (2005) actually find cash-financing in mergers to be preferred 80.2% of the time rather than equity and so it would seem fitting that no value is created through an acquisition.

Despite the poor evidence for the overvalued samples, the undervalued sample shows contrasting results. In fact, acquirers that announce their merger deal when they are undervalued and progress successfully to completion can generate significant value of 2.26% (0.000) around the date of announcement and 1.06% (0.019) at the date of outcome. This is supported in Panel F once the failed sample has been purified for the reason of failure. Instead of conducting mergers when the stock price is overvalued, UK acquirers benefit from the reverse – announcing and completing a merger, particularly using cash, when the stock price is valued low. The merger deal, in the vein of Draper and Paudyal (2008), attracts the market's attention and this leads to significant wealth creation in the UK market. Unlike the US where overvaluation can create significant value, the UK market appears to value acquisitions by undervalued acquirers and thus firms are advised to follow such actions. If the stock value is below the fundamental value, then the acquisition of the target's assets raises the fundamental value of the acquirer and thus its shareholders can benefit twice – from the correction of the undervalued stock price upward as well as the additional assets raising this intrinsic level upwards.

When the analysis is repeated using a three-day event window, the above discussion remains true. The results are not discussed here within the main text, but once again, the reader is invited to view this further evidence in Table 6.

The final analysis of value creation emanating from mergers within the UK market centres around deals conducted in different periods when the market valuation can vary. The value of the market can proxy for the conditions in which the deal is undertaken. If the market is valued highly, then it is generally believed in the literature that investors hold optimistic views over the future. Firms invest more, with mergers as a suitable vehicle to do so, while investors and households choose to spend their holdings driving the economy further forward. However, when the market is valued low, the effects can be similar to those of a recession. Firms cut back on their investments and increase the level of due diligence. Conservatism holds the reins in such conditions and the economy witnesses a contraction as money, in effect, is held rather than spent. Merger activity decreases in such climates as managers fret over negative media exposure.

The results of the analysis of mergers according to the valuation of the market are presented in Table 7. Deals undertaken when the market is valued highly are shown in the first column while those undertaken when the market is valued low are shown in column two. The third column displays the differential performance between the two sub-samples of deals. As reasoned, when the market is valued highly, firms and investors spend more and invest as they hold optimistic views of the future that stock prices will rise upward. Firms in particular, with free cash flow, put this to use by undertaking a merger and acquisition. On the other hand, when the market is valued low, investment and spending contracts with widespread conservatism. This is supported by the number of deals undertaken in high-value periods outnumbering those in low-value periods, with 1,816 in the former sample and 1,057 in the latter. However, despite conservatism which could in fact result in better long-term mergers in low-value periods given a stronger desire to undertake more rigorous due diligence, the market in this short-time frame reacts in a cautious way to investments made in poor market conditions. On the other hand, when the market is highly-valued, then the firm should benefit from positive and optimistic market reactions upon the announcement and completion of their deal. These should furthermore be significantly better than the market reactions in low-value periods if indeed, the condition of the market is an important factor in value creation.

Panel A of Table 7 presents the results for the full successful and failed samples combined. As expected, acquirers earn significantly positive abnormal returns around the date of announcement of 1.44% (0.000) when the market is valued highly, further complemented with significantly positive outcome date returns of 0.84% (0.000). This positive and significant market reaction holds once again for cash acquirers and for those who use a mixture of equity and cash to finance their deals. Interestingly, despite only 81 mergers being paid for only using equity when the market is valued high, stock acquirers do earn marginally significant positive returns of 1.09% (0.104), significant at the 11% confidence level. This is the first significant result that has been found thus far for stock-financed acquirers and it appears albeit weakly, that the market optimism in high-value periods appears important in the decision to merge.

On the other hand, when the market is valued low, acquirers earn significant announcement returns of 0.40% (0.064) but there are, on average, insignificant outcome returns of 0.14% (0.519). When the differential performance of acquirers undertaking deals in high-value markets are compared to those in low-value markets in the third column of Table 7, the results show that deals in high-value markets significantly outperform those in low-value periods, by 1.05% (0.000) at the announcement date and 0.70% (0.006) at the date of outcome. This shows that the market is significantly more receptive to the announcement of deals in high-value periods than at other times. In addition, while cash acquirers in low-value periods do earn 0.75% (0.011) significantly positive announcement returns, these are still significantly 0.92% (0.021) lower than the same returns in high value periods. Once again, the value of conducting a merger when the market is highly valued is shown in terms of short-term value creation.

The results of the Successful sample in Panel B are consistent with those in Panel A. Successful acquirers earn positive and significant announcement returns of 1.48% (0.000) as well as enjoying completion returns of 0.89% (0.000). These are both significantly more than those acquirers that successfully complete their deals in low-value periods. Indeed, successful acquirers significantly earn 1.00% (0.000) less at the announcement date and 0.59% (0.016) less at the date of completion in low-value periods.

Perhaps most interesting about the results in Table 7 is the market's reaction to failed deals in Panel's C and D. When the market is valued highly so that optimism is also correspondingly high, acquirers that announce a deal that fails earn insignificant returns at both the date announcement and withdrawal dates. However, when the market is valued low such that participants become more conservative over the future and indeed firms are more prudent with their investments, those deals that subsequently fail earn significantly negative losses of -2.24% (0.017) at the announcement date. These are accompanied by stronger negative losses of -4.96% (0.096) at the date of withdrawal. Thus, when the market is valued low, acquirers should ensure that any deal to be undertaken is done so with confidence that it can and will complete. Without this, there are significantly negative returns some 2.92% (0.010) lower than if they undertook a similar deal when the market was more optimistic. The market appears to be forgiving when optimism is high, but punishing when it is low. The results of Panel D also reaffirm these findings, with a significantly stronger loss 3.44% (0.044) lower for acquirers in low-value periods relative to high-value ones.

The differential performance of successful acquirers relative to those which fail is arguably most important in this chapter. The results in this respect are shown in Panel's E and F of Table 7. There appears to be no significant value creation in high-value periods for successful acquirers relative to those which fail. None of the results indicate any significance in the first column for Panel's E and F. However, the importance of ensuring the quality of the deal in low-value periods is reaffirmed with significant value creation if the deal completes. Without the completion of the deal, Panel's C and D show significant punishment from the market and thus due diligence is imperative in this sense. Panel E shows that there is significant wealth creation of 2.72% (0.005) for successful acquirers at the date of announcement and a further 5.25% (0.079) significant gain when the deal completes comparative to if it should fail. This is also true for mixed-financing acquirers. These results also hold in Panel F where there is a significant announcement return 2.82% (0.057) higher for successful acquirers relative to acquirers whose deals fail. All in all, the results show the importance of deal completion in low-value periods. Without the success of the deal, firms leave themselves open to severe market punishment.

For robustness, this analysis is repeated centring on a three-day window, more specific to the merger announcement and outcome dates. The above discussion continues to hold and the results are provided in Table 8. For brevity, the discussion will not be repeated due to the similarity with the above analysis.

To further view the value able to be created in the UK, the final part of this section analyses the value creation in the interaction between firm valuation and market conditions. Table 9 presents the results for the 5 day CAR of the overvalued and undervalued firms discussed earlier for deals which were undertaken in high-valuation markets.

Panel A of Table 9 shows that overvalued acquirers that undertake their merger in a high-value period earn 0.75% (0.000) significant positive returns around the date of announcement and marginally significant gains of 0.27% around the outcome date (0.102). In contrast, undervalued acquirers in Panel A earn 1.75% (0.000) around the date of announcement and 1.31% (0.000) around the date of outcome. These returns are significantly better than the overvalued sample indicating once again that even in high value periods, when the market is most likely to be optimistic, undervaluation proves to be a stronger incentive for merger activity.

The performance of the successful sample is shown in Panel B and the returns are consistent with those in Panel A. The most important aspect of this analysis is the differentials between Panel B with Panel's C and D. This is shown in Panel's E and F. If the returns are positive and significant, then mergers create significant value while conversely, if they are negative and significant, then mergers destroy significant wealth. Panel's E and F show that for overvalued acquirers then is neither value creation nor destruction. The analysis provides insignificant differences between the performance of acquirers that succeed and those which fail. On the other hand, for undervalued acquirers in high-value periods, significant wealth of 2.81% (0.020) is created at announcement. This is particularly for mixed financed deals in both Panel's E and F. Overall, undervaluation is a stronger merger motive in high value periods refuting market timing in the UK.

The same analysis is robustly checked for a three-day event window. The results are provided in Table 10. Due to the high degree of similarity with those results already discussed, Table 10 will not be analysed within the main text but is provided for clarity.

Lastly, Table's 11 and 12 depict the results in low-value periods. Because there is a lower volume of transactions for the failed sample in this analysis, no meaningful analysis can be conducted. Therefore, these tables will not be discussed within this text. However, the results are provided for the sake of comprehensiveness.

3.3.2. Cross-Sectional Analysis

While the evidence gathered above has shown the univariate effects of deal outcome, firm misvaluation and market conditions upon value creation, the determinants and influence of these results are unknown. In order to investigate the relationship between the returns experienced and various explanatory factors, such as acquirer size (Moeller *et al.*, 2004), deal outcome (Jensen and

Ruback, 1983; Limmack, 1991), target status (Chang, 1998) and method of payment (Travlos, 1987), cross-sectional analyses are conducted to further examine the explanatory factors behind the wealth changes experienced within the UK merger market.

To explore the findings of this chapter further, the returns of the short-term analysis are regressed on a series of independent variables proven within the existing literature to be influential in terms of an acquirer's performance during and after a M&A deal. In all regressions, the main explanatory variables used are deal outcome, firm valuation and market valuation.

We run a series of regressions where the dependent variable changes as outlined earlier in the Data and Methodology section. The acquirer's five-day CARs around announcement and outcome are modelled in two separate analyses, while for robustness the same analysis is repeated centring on a three-day event window. Table 13 reports the results for the cross-sectional analysis of five-day CARs around the deal's announcement date.

In regressions (1) to (6) the dependent variable is the five-day CAR around the date of announcement. In models (2) and (6), there is a positive and significant relationship between the success of the deal and the returns generated. This confirms the univariate findings that over the short-term, UK acquirers create shareholder value. The route cause is not market-timing as suggested by the US evidence however with no support found in the univariate analysis for a significant differential performance of successful samples relative to failed while the stock-financed dummy shows a significantly negative impact.

Model (3) focuses upon the effect of firm overvaluation and this term is also included in model (5). In both situations, firm overvaluation is shown to have a positive and negative effect upon wealth creation as supported by the literature. On the other hand, as supported by the analysis of the previous section, firm undervaluation has a significant and positive effect on acquirers' wealth creation from merger activity as shown in models (4) and (6).

Finally, the third-facet of this chapter's analysis is the effect of the market's valuation upon the acquirer's stock price. There are two variables within the cross-sectional analysis to analyse in this essence – high-value market and low-value market take the value of 1 if the deal in question was undertaken during a high-value or low-value period respectively. The univariate short-term analysis showed that the market positively responded to successful deals in both periods. Table 13 indicates that there is a significant and positive reaction across all models reported for deals announced in high-value market conditions. However, there is no significant impact exerted by low-value market conditions across all models and thus it is recommended that acquirers can benefit most through the announcement of deals in periods when the market is optimistic and valued highly. Indeed, this result combined with the univariate results seems to insinuate that it is important to announce only a deal that the firm believes almost certainly it can complete in conditions when the market value is low, but firms can earn higher profits by announcing any merger deal in high-value periods.

Table 14 displays the results of the cross-sectional analysis of merger outcome returns. The results indicate that the most important factor at the merger announcement date is the valuation of the firm. The market appears to somewhat predict the outcome of the merger at the announcement with a positive reaction to those which succeed. However, firm valuation, while negatively and significantly related to value creation, plays a stronger role in that the firm suffers a negative impact from overvaluation at deal announcement and deal outcome, as supported by models (3) and (5) in Table 14. On the other hand, firm undervaluation has a significantly positive effect once again on the acquirer's value creation. In the vein of Draper and Paudyal (2008), it does indeed appear the case that by grabbing the market's attention, acquirers can force an upward revaluation of their stock price. However, the conditions of the market play less of an important role in Table 14 and the cash dummy also loses its positive significance. Nevertheless, stock-financing still exerts a negative impact, as would be expected given significance of the overvaluation dummy.

The results of Table's 13 and 14 are supported with the robustness check using three-day CARs. The robust three-day results are shown in Table 15 for the announcement effects and Table 16 for the deal outcome effects. The conclusions discussed above remain true and so the discussion will not be repeated for brevity. Additionally, if those deals that fail for reasons endogenous to the acquirer are removed, then the results can be viewed more clearly. Table's 17 to 20 repeat our previous analysis with only the returns from the successful sample combined with the failed exogenous sample. Once again, all of the results remain true and thus will not be further analysed. However, they are included once more for perusal.

3.3.3. Long-Term Analysis

To view value creation from a merger using only a short-term event window fails to take account for the impact of the deal upon the acquirer over the long-term, once the target has been incorporated into the firm's operations. However, the question becomes how long should the analysis continue for? The standard literature tends to view the long-term performance of the acquiring party over a three-year holding period. However, there are some studies that prefer a shorter two-year window. In this vain, this chapter conducts long-term analysis over both periods to examine the impact of the merger over the second and third years post-acquisition.

Table 21 reports the long-term returns for the samples over a three-year period, once the newly combined firm has already incorporated most changes and endured the integration difficulties. The results are in stark contrast to the short-term analysis. Instead of finding significant positive returns across the samples, the long-run shows a significant long-term decline for all acquirers, regardless of deal outcome. On average, acquirers significantly lose -23.09% (0.000) during the three-years post-announcement while in the three-year post-deal outcome, these losses increase to -24.05% (0.000) as shown in Panel A. Interestingly, while there are no significant returns for stock-financed acquirers in the short-term analysis, the long-term work indicates that there is a significant loss for acquirers that finance their deals using stock. Panel A shows that stock-acquirers lose on average -43.21% (0.000) from announcement and -44.29% (0.000) from outcome. Significant losses are endured across all methods of payment, however, the strongest losses emanate from acquirers that issued stock to acquire. This is consistent with the signalling literature which indicates that over the long-term, there should be a downward decline in the stock prices of firms that issue equity, as doing so indicates overvaluation on the part of the acquirer.

The evidence in Panel B supports Panel A, and it is clearly successful acquirers that are driving the significant wealth losses for the stock sub-sample. Acquirers that successfully complete but use equity to do so, earn -47.09% (0.000) from the date of announcement and -47.02% (0.000) from the date of completion. However, the argument of Savor and Lu (2009) suggests that acquirers that finance their deals using stock will inevitably witness a long-term decline as it would be irrational to issue stock at any period other than when it is overvalued. Thus, it is expected that this sub-sample should incur losses. The interesting investigation is to examine whether or not these losses are significantly better than those acquirers which announce an intention to use equity but fail to do so, or indeed whether they are worse. If the losses are lower for successful acquirers relative to those that fail then significant support for market-timing is found as the long-run decline is cushioned by the target's assets. However, if successful acquirers suffer stronger losses, then merger activity does not benefit the acquirer and the UK market would show either insignificant support for market-timing, or would significantly reject it.

Panel's E and F view the differential performance between successful acquirers and their control group – acquirers that fail to execute their deal. On average, successful acquirers significantly underperform those which fail from the date of announcement with -12.32% (0.042) losses. There are also marginally significant losses from the date of deal outcome as well, with an underperformance of -9.29% (0.123). When those deals that fail for reasons endogenous to the acquirer are removed, these results become even stronger. In fact, successful acquirers significantly underperform those which exogenously fail by -27.67% (0.005) from the date of announcement, while this drops slightly to -21.15% (0.030) from the date of completion. This undoubtedly shows that market-timing does not hold in the UK market. The US results, and the intuitive methodology of Savor and Lu (2009), suggest that market-timing can be rewarding for US acquirers. Table 21 shows that this is not the case for the UK over the long-term where successful acquirers significantly underperform those that succeed. In fact, acquirers, it would seem, would be better placed had their deals have failed in the short-term bearing only a short-lived negative market disappointment.

When the payment method for the deal is controlled for, it can be seen that stock financed acquirers who successfully complete their deal earn significantly less than those which fail to execute their deal. From the merger announcement date, this underperformance is -40.44% (0.059) while this falls to -28.45% (0.105) from the date of outcome, suggesting somewhat that perhaps the market does readjust the stock price of the acquirer between the date of announcement and outcome, despite the short-run evidence.

However, when those deals that fail for exogenous reasons are removed in Panel F, there is insignificant evidence for stock-financed acquirers. Although there is a negative underperformance, the differential performance fails to retain its significance. This could indicate that the market does not punish those acquirers which fail for reasons outside of their control while those which fail for reasons endogenous to their firm suffer from negative declines in their stock prices.

While the stock-financed differentials do not retain their significance in Panel F, there is still an overall significant underperformance of successful deals. From the announcement date, there is a significant negative underperformance of -27.67% (0.005) while this is -21.15% (0.030) from the date of deal outcome. Unequivocally, the evidence displays no similar findings to that of Savor and Lu (2009) or indeed for the predictions of Shleifer and Vishny (2003). There is no significant evidence of market-timing in the UK, even when this chapter adopts the intuitive methodology of Savor and Lu (2009).

Table 22, for robustness, performs the same analysis for a shorter-term period over two years. Again, successful acquirers significantly underperform, and this is particularly true for those that fail for exogenous reasons with a significant underperformance of -14.87% (0.022) from the date of announcement, and -16.52% (0.012) from the date of outcome. For brevity, the discussion will not be repeated.

In the short-run, we found that undervalued acquirers created significant value for their shareholders while on the whole, those which were overvalued did not perform significantly different to those which failed, thus there was neither value creation nor destruction. Furthermore, there were minor significant upward increases in the stock prices for overvalued acquirers in the overall sample. Table 23 reports the thirty-six month BHARs for acquirers over the long-term stratified by firm valuation.

As in the short-term period, the undervalued sample significantly outperforms. From the date of announcement, undervalued acquirers earn 15.10% (0.000) higher returns than those firms that conduct mergers in periods when they are overvalued. This is supported by the results from the date of outcome, where the undervalued sample once again performs better with 13.27% (0.000) better returns. Across the payment method sub-classifications, the results indicate that stock-financing does not produce any short-term or long-term value for UK acquirers. The results indicate evidence of significant underperformance for those acquirers that are overvalued and use stock compared to those that are undervalued and use stock – some -22.83% (0.055) lower from the date of outcome. In fact, Panel A indicates superior returns via lower losses for the undervalued sample across every category in the long-term period.

Focussing specifically upon those deals that succeed, as shown in Panel B, as well as the performance of such deals relative to those which fail, as shown in Panel's E and F, the results indicate that mergers do not create significant long-term value. Successful acquirers that are overvalued at the time of the merger deal lose on average 28.40% (0.000) in the thirty-six months from the date of announcement and 28.36% (0.000) from the date of completion. These figures are heightened with the use of stock-financing. Overvalued stock acquirers that successfully complete their deals suffer a 46.82% (0.000) long run decline in their stock price from the date of announcement and 47.67% (0.000) from the date of completion.

Panel B also shows a long-term decline in the stock prices of undervalued acquirers as well, however these are also lower than the overvalued sample. In the thirty-six month post-merger announcement period, undervalued successful acquirers suffer a stock price fall of 13.10%

(0.000) while this increases to 14.80% (0.000) from the date of completion. The returns for undervalued stock acquirers are also negative with losses up to 26.54% (0.006) from the date of completion.

While there are significant losses for failed acquirers, the question is whether or not they are higher or lower than those experienced by successful ones. Here, the evidence indicates that when the full failed sample is included, there is no significant difference between the two groups. Successful acquirers do not significantly outperform those which fail as shown in Panel E. If successful acquirers are compared to a clean sample of deals which fail for exogenous reasons then the results actually indicate significant wealth destruction over the long-term period. In Panel F, from the date of announcement, successful overvalued acquirers significantly underperform those which fail by 19.66% (0.090) and 15.86% (0.123) from the date of outcome. This underperformance is also true for undervalued acquirers where successful completing acquirers earn 20.55% (0.092) less than their failed counterparts.

The evidence in Table 23 is largely supported in Table 24. However, the differential returns of Panel's E and F lose their significance. They become however only marginally significant at the 11% and 12% confidence levels. Either way, the results contrast US conclusions that indicate that acquirers can create value through reducing the long-term losses experienced by acquirers with the addition of the target's assets. Table's 23 and 24 disagree with this evidence and provide evidence that suggests the UK market does not generate long-term value creation for acquirers.

The results contrast the US and this is largely because the takeover environment in the UK contrasts the US. The UK is governed by strong regulation under the Panel on Takeover and Mergers as well as a completely different preference in structuring M&A deals. While in the US, style investing (i.e. value investing or growth investing) has always been popular, this has not been the case in the UK. Across the Atlantic, UK firms and their advisors are required under the Panel to offer cash to all existing shareholders if the deal will result in the acquirer purchasing more than 30% of the target's stock. Thus regulatory wise, UK acquirers are constrained to effectively offering a maximum of 30% in stock and are forced therefore to offer the remaining in cash. Once the acquirer has above a 95% holding, the remaining target shareholders are required to sell-out. This means that the motivation to window-dress and indeed to manipulate stock prices cannot show up at the merger announcement as supported by the results. Instead firms may window dress before the acquisition and this thesis will explore this point in more depth in the coming chapters.

The final section for analysis is the performance of acquirers in high and low valuation markets, as well as the combination of this with overvalued and undervalued acquirers. Table 25 reports the long-term performance of UK acquirers categorised by market valuation.

Panel A shows that on average, high-valuation deals generate significant wealth losses greater than those incurred when the market is valued low. Overall, acquirers conducting their deals in high-valuation markets lose 19.41% (0.000) from the date of announcement and 20.45% (0.000) from the date of completion. On the other hand, those that announce their merger when the market is valued low suffer long-run declines of 16.71% (0.000) while these increase to 18.51% (0.000) from the date of completion. Stratifying for method of payment, Panel A reports significant wealth losses for all payment methods in both high and low valuation markets. Panel B also supports these conclusions when the sample is focussed to looking at only those that succeed. However, there is no significant difference between the two market states in either Panel's A or B.

While significant wealth losses are found for UK acquirers over the long-term in Panel's A and B, the comparative performance with the failed sample can shed more light on the significance of these losses. Because the failed sample is reduced in size however, it is difficult to obtain reliable results. There is nevertheless significant wealth destruction for UK acquirers undertaking their deals when the market is highly valued and cash is used as payment, as shown in Panel F. Losses of up to 41.40% more are experienced by successful acquirers relative to those that fail from the date of announcement. However, no significant evidence is found for stock-financed deals. This indicates once again that mergers do not significantly create value in the UK market. When the market is optimistic in the short-term, as proxied by high-valuation markets, this does not produce better long-term results. UK acquirers still continue to negatively underperform. This is also true for the sample of deals conducted during low-valuation markets. Successful acquirers either do not significantly create value or significantly destroy it, particularly when the study focuses only on those deals that fail for exogenous reasons.

The results and discussion above are repeated in Table 26 for a shorter post-merger period over twenty-four months. The results support the analysis above and for brevity shall not be re-discussed.

Finally, the interaction between the market valuation with the valuation of the firm could provide more insight into the true worth of market timing in the UK market. The short-term results reported that overvaluation in the short-term did not create any significant value in high-value periods while undervaluation did. However, no meaningful inference could be drawn for low-value periods due to the low number of deals after the interaction. Given the restrictions for long-term analysis whereby at least three years of post-merger data is required, the number of deals in each category is too small to allow for any worthwhile statistical analysis to be conducted. Thus, the results are provided in Tables 27, 28, 29 and 30 but are not discussed in the text.

3.4. Conclusion

Central to academic research over the past thirty years has been to address the riddle of both what merger wealth effects are and why mergers are initiated despite evidence to suggest significant wealth destruction for acquirers. While targets earn significant gains from being acquired, the same cannot be said within the literature for acquirers. This chapter assesses the value creation for acquirers through conducting a comprehensive analysis of the UK merger market.

The question of how to truly measure performance is a well-discussed topic. Various benchmarks have been offered over the years as to how best we can define a merger as being a success or a failure for a particular firm. A recent strand of literature emanating from the seminal work of

Shleifer and Vishny (2003) argued that mergers are a success for acquiring firms if they manage to correctly time the market so that they pay for the target's assets using overvalued equity. Savor and Lu (2009) developed an approach based upon this premise whereby those deals which succeed are measured in terms of performance against a benchmark group which acts as a control for the results of the acquirer. The benchmark group offered is deals under the same circumstances that fail to complete. Most importantly in this setting is that while the deals that fail can be compared to those that succeed, for the true analysis, the deals which fail must do so for 'exogenous' reasons – that is, they must fail for circumstances outside of the acquirers control. It is this approach that is adopted within this chapter.

The results indicate that over the short-term period, acquirers create significant short-term value. The successful sample significantly outperforms the benchmark group. However, this reverses over the long-term period where it would in effect, seem more attractive for the deal to have actually failed rather than completed. Thus despite the US evidence suggesting successful market-timing creates value for acquirers, the results generated in the UK market in this chapter show the reverse. This significantly contributes to our understanding of the UK merger market re-emphasising that what holds in the US cannot simply be taken as given in other markets.

In addition, the work develops the analysis of the previous literature through classifying acquirers as being either overvalued or undervalued at the time of the acquisition. The short-term and long-term results provide more support to the idea of conducting a merger when the firm is undervalued rather than when it is overvalued. Draper and Paudyal (2009) offer that this is due to the attention that such corporate events attract for the acquiring firm. If there has been a misvaluation such that the acquirer's market value is below the fundamental level, then a corporate event such as a merger can attract the market's attention to re-evaluate the prospects of the acquiring party such that shareholders benefit from this upward correction. The work of this chapter fully supports this reasoning of Draper and Paudyal (2009) and fails to show any true support for the benefits of market-timing via overvalued acquisitions.

Finally, this chapter contributes to the existing literature through assessing the performance of acquirers while controlling for the valuation of the market also. Croci, Petmezas and Vagenas-Nanos (2010) highlight the importance of the valuation of the market. Bouwman, Fuller and Nain (2009) additionally suggest that the valuation of the market can affect the quality of the acquisitions undertaken. The results of this chapter suggest that while the market positively responds in the short-term to those deals announced when the market is valued highly, the quality of these acquisitions is questionable given the outperformance of those deals conducted in low-valuation periods.

In conclusion, despite this evidence and partitioning of the sample by either firm or market valuation, the results remain consistently true that acquirers fail to materialise any long-term wealth gains.

Figure 2: Merger Bids by Method of Payment over Time

This figure reports the number of bids made each year. The upper bar plots the number of deals financed using a mixture of cash and stock. The middle bar shows the number of deals financed using 100% stock. The lower bar plots the number of merger bids financed using 100% cash.

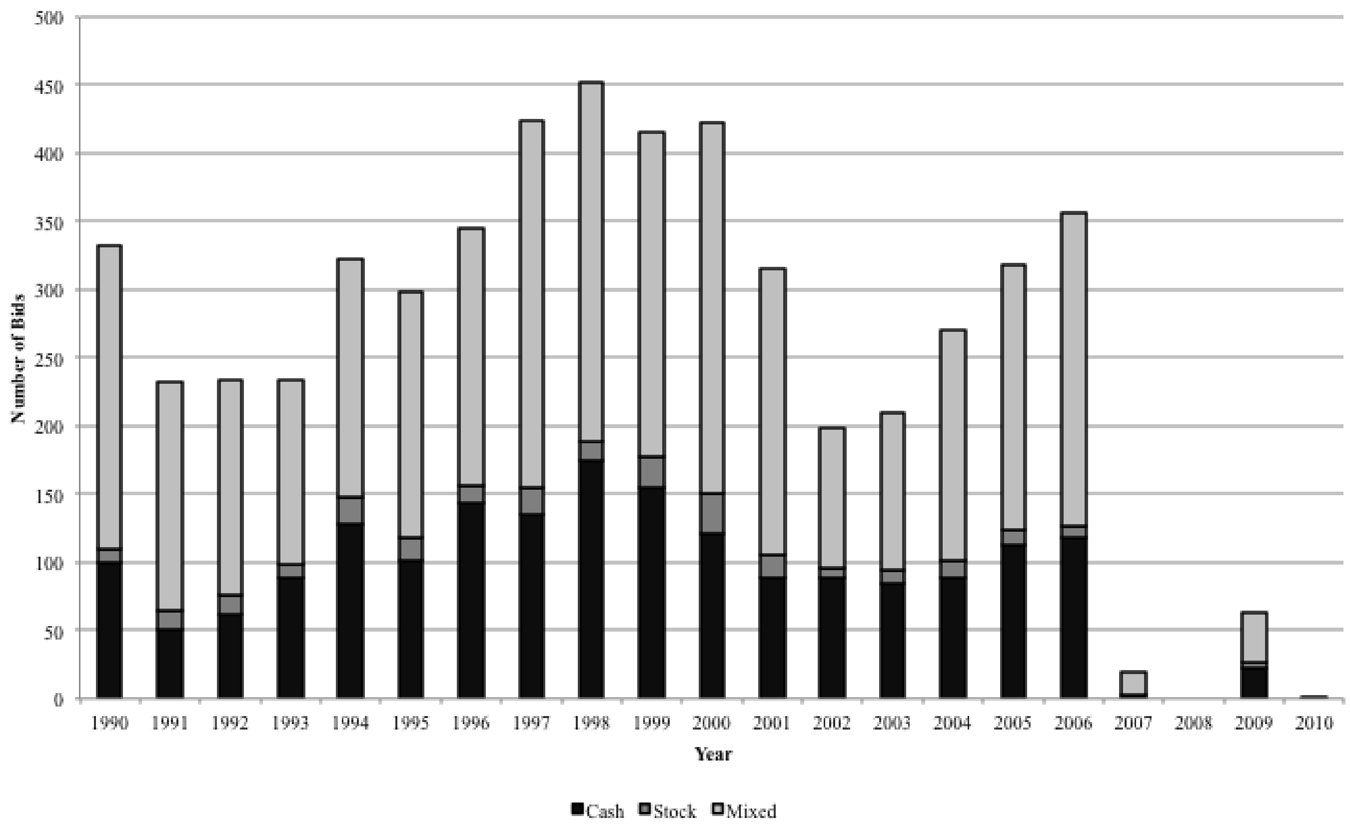

Table 1: Time-Series Distribution of Merger Bids

This table reports the time-series distribution of merger bids according to deal outcome and payment method. The Successful sample contains all bids which resulted in the completion of an acquisition. The Failed All sample contains all deals that failed to complete. The Failed Exogenous sample contains only bids that failed for exogenous reasons (i.e. outside of the acquirer's control). The Cash (Stock) samples contain deals that were financed using 100% cash (stock). The Mixed sample contains deals financed using a mixture of cash and stock.

Year	Successful				Failed All				Failed Exogenous			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
1990	309	98	8	203	23	2	1	20	12	2	1	9
1991	206	49	14	143	26	1	1	24	14	0	1	13
1992	214	61	14	139	20	1	0	19	4	0	0	4
1993	223	87	9	127	10	2	0	8	4	1	0	3
1994	315	128	18	169	8	0	2	6	4	0	1	3
1995	284	96	15	173	14	5	2	7	5	3	1	1
1996	334	142	12	180	11	2	0	9	8	1	0	7
1997	416	131	18	267	8	4	2	2	6	4	2	0
1998	439	172	11	256	13	2	3	8	3	0	1	2
1999	395	150	20	225	20	5	3	12	12	1	3	8
2000	407	119	27	261	16	2	2	12	7	0	1	6
2001	306	86	15	205	9	2	2	5	2	1	0	1
2002	196	88	6	102	3	1	0	2	1	0	0	1
2003	203	85	9	109	7	0	0	7	5	0	0	5
2004	263	86	13	164	8	2	0	6	3	1	0	2
2005	306	110	8	188	12	3	3	6	9	3	1	5
2006	341	111	5	225	15	7	3	5	6	3	2	1
2007	19	3	0	16	0	0	0	0	0	0	0	0
2008	0	0	0	0	0	0	0	0	0	0	0	0
2009	63	22	4	37	0	0	0	0	0	0	0	0
2010	1	1	0	0	0	0	0	0	0	0	0	0
Total	5240	1825	226	3189	223	41	24	158	105	20	14	71

Table 2: Chapter Three - Summary Statistics

This table reports the summary statistics for the three samples: S refers to the Successful sample that contains all bids which resulted in the completion of an acquisition; F(A) relates to the Failed All sample that contains all deals that failed to complete; and F(E) refers to the Failed Exogenous sample contains only bids that failed for exogenous reasons (i.e. outside of the acquirer's control). N defines the number of bids in each category. The market value (MTBV) is the market value (market to book value) of the acquirer one month before the announcement of the deal (£ millions). To classify high and low valuation months we use the detrended P/E proxy of Bouwman, Fuller and Nain (2009), and we report the number of deals conducted in high and low valuation conditions for each deal category. Time Interval measures the number of days between deal announcement and either completion or withdrawal for the samples respectively. For each of the deal categories, we consider the cases of acquisitions of privately held targets; publicly listed targets; domestic targets; foreign targets; targets within the same industry (Related Target); targets within different industries (Unrelated Target); acquirers with high MTBV values (glamour); acquirers with low MTBV values (value); small (big) acquirers as measured using the bottom (top) 30% of acquirers when ranked by market value one month prior to the announcement of the deal; and finally those deals financed using 100% cash ('Cash'), 100% stock ('Stock') or a mixture of cash and stock ('Mixed').

Category	N			Market Value (£ mil)			MTBV			High Valuation Month			Low Valuation Month			Time Interval (Days)		
	S	*F(A)*	*F(E)*	*S*	*F(A)*	*F(E)*	*S*	*F(A)*	*F(E)*	*S*	*F(A)*	*F(E)*	*S*	*F(A)*	*F(E)*	*S*	*F(A)*	*F(E)*
All	5240	223	105	311	1164	1456	2.49	2.17	2.26	1730	87	41	1025	32	15	21	120	132
Private Target	3102	23	6	267	1001	2017	2.59	2	2	982	10	2	602	3	1	15	183	384
Public Target	328	142	77	436	1119	1296	2.32	2.13	2.29	128	56	32	58	23	11	49	101	123
Subsidiary	1810	58	22	365	1339	1864	2.35	2.33	2.23	620	21	7	365	6	3	27	140	95
Domestic	3534	142	75	251	712	1023	2.38	2.07	2.15	1180	58	30	689	21	11	16	81	83
Foreign	1706	81	30	435	1957	2540	2.72	2.35	2.52	550	29	11	336	11	4	31	188	254
Related Target	1343	90	45	267	1252	1763	2.48	2.2	2.17	414	31	16	254	19	9	24	142	143
Unrelated Target	3897	133	60	326	1104	1226	2.49	2.15	2.33	1316	56	25	771	13	6	20	104	124
Glamour	1315	54	23	380	1390	1752	4.44	3.86	4.25	465	16	9	246	8	2	23	99	84
Value	1174	53	20	244	867	1206	1.07	0.92	0.92	400	25	9	244	11	5	21	128	90
Small	1221	53	2	28	39	46	2.11	2.02	1.38	401	20	0	206	9	0	17	54	52
Big	1219	57	14	924	3531	3648	2.75	2.34	2.08	415	16	4	257	8	2	29	187	211
Cash	1825	41	20	356	1398	2057	2.47	2.2	2.63	570	13	5	354	6	2	17	141	176
Stock	226	24	14	216	338	354	2.54	2.38	2.65	72	9	7	40	5	2	38	76	59
Mixed	3188	158	71	292	1229	1505	2.5	2.13	2.08	1087	65	29	631	21	11	22.02	121	134

Table 3: Five-Day CARs

This table reports the short-run five-day (-2,+2) cumulative abnormal returns (CARs) for the samples at announcement (DA) and outcome (DO), which is either the date of effective completion (DE) or the date of effective withdrawal (DW) for the successful and failed samples respectively. We measure the CARs using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The Overall sample contains all deals in the full dataset. The Successful sample contains all deals which were subsequently completed so that the acquirer gained control of the target with a holding of +51%. The Failed All sample contains all deals which were subsequently withdrawn so that the acquirer did not gain control of the target. The Failed Exogenous sample contains all deals which failed for reasons exogenous to acquirer. Cash deals refer to those which were financed 100% using cash. Stock deals refer to those which were financed 100% using equity. Mixed deals refer to those deals with known information confirming that the deal was financed using equity and cash. We control for the different sample sizes using STATA in Panel's E and F. The P-value is shown in parentheses. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	All	Cash	Stock	Mixed
		Panel A: Overall		
Mean DA	1.00%***	1.27%***	0.10%	0.92%***
P-Value	(0.000)	(0.000)	(0.844)	(0.000)
Mean DO	0.68%***	0.89%***	-0.14%	0.63%***
P-Value	(0.000)	(0.000)	(0.766)	(0.000)
N	5462	1866	250	3346
		Panel B: Successful		
Mean DA	1.05%***	1.31%***	0.06%	0.98%***
P-Value	(0.000)	(0.000)	(0.909)	(0.000)
Mean DE	0.74%***	0.91%***	-0.34%	0.72%***
P-Value	(0.000)	(0.000)	(0.470)	(0.000)
N	5239	1825	226	3188
		Panel C: Failed All		
Mean DA	-0.34%	-0.83%	0.46%	-0.33%
P-Value	(0.351)	(0.253)	(0.729)	(0.443)
Mean DW	-0.67%	-0.29%	1.79%	-1.15%
P-Value	(0.250)	(0.687)	(0.355)	(0.127)
N	223	41	24	158
		Panel D: Failed Exogenous		
Mean DA	-0.65%	-0.20%	0.33%	-0.97%
P-Value	(0.181)	(0.685)	(0.827)	(0.135)
Mean DW	-0.43%	-0.86%	0.26%	-0.45%
P-Value	(0.515)	(0.144)	(0.920)	(0.595)
N	105	20	14	71
		Panel E: Successful – Failed All		
Diff DA	1.39%***	2.14%***	-0.40%	1.31%***
P-Value	(0.000)	(0.005)	(0.782)	(0.004)
Diff DO	1.41%***	1.20%	-2.14%	1.86%**
P-Value	(0.017)	(0.105)	(0.286)	(0.015)
		Panel F: Successful – Failed Exogenous		
Diff DA	1.70%***	1.51%***	-0.27%	1.95%***
P-Value	(0.001)	(0.007)	(0.869)	(0.004)
Diff DO	1.17%*	1.77%***	-0.60%	1.17%
P-Value	(0.082)	(0.006)	(0.818)	(0.173)

Table 4: Three-Day CARs

This table reports the short-run three-day (-1,+1) cumulative abnormal returns (CARs) for the samples at announcement (DA) and outcome (DO), which is either the date of effective completion (DE) or the date of effective withdrawal (DW) for the successful and failed samples respectively. We measure the CARs using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The Overall sample contains all deals in the full dataset. The Successful sample contains all deals which were subsequently completed so that the acquirer gained control of the target with a holding of +51%. The Failed All sample contains all deals which were subsequently withdrawn so that the acquirer did not gain control of the target. The Failed Exogenous sample contains all deals which failed for reasons exogenous to acquirer. Cash deals refer to those which were financed 100% using cash. Stock deals refer to those which were financed 100% using equity. Mixed deals refer to those deals with known information confirming that the deal was financed using equity and cash. We control for the different sample sizes using STATA in Panel's E and F. The P-value is shown in parentheses. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	All	Cash	Stock	Mixed
		Panel A: Overall		
Mean DA	0.83%***	0.97%***	0.24%	0.79%***
P-Value	(0.000)	(0.000)	(0.594)	(0.000)
Mean DO	0.56%***	0.69%***	-0.26%	0.55%***
P-Value	(0.000)	(0.000)	(0.532)	(0.000)
N	5462	1866	250	3346
		Panel B: Successful		
Mean DA	0.88%***	0.91%***	-0.34%	0.85%***
P-Value	(0.000)	(0.000)	(0.470)	(0.000)
Mean DE	0.62%***	0.72%***	-0.26%	0.63%***
P-Value	(0.000)	(0.000)	(0.560)	(0.000)
N	5239	1825	226	3188
		Panel C: Failed All		
Mean DA	-0.35%	-0.76%	0.28%	-0.34%
P-Value	(0.257)	(0.291)	(0.827)	(0.326)
Mean DW	-0.98%*	-0.66%	-0.28%	-1.17%
P-Value	(0.079)	(0.278)	(0.816)	(0.120)
N	223	41	24	158
		Panel D: Failed Exogenous		
Mean DA	-0.50%	0.45%	-0.03%	-0.86%
P-Value	(0.225)	(0.344)	(0.981)	(0.107)
Mean DW	-0.62%	-1.02%	-0.91%	-0.45%
P-Value	(0.273)	(0.114)	(0.538)	(0.561)
N	105	20	14	71
		Panel E: Successful – Failed All		
Diff DA	1.23%***	1.68%**	-0.63%	1.19%***
P-Value	(0.000)	(0.026)	(0.651)	(0.001)
Diff DO	1.61%***	1.38%**	0.02%	1.81%**
P-Value	(0.005)	(0.029)	(0.990)	(0.018)
		Panel E: Successful – Failed Exogenous		
Diff DA	1.38%***	0.56%	0.27%	1.71%***
P-Value	(0.001)	(0.262)	(0.854)	(0.002)
Diff DO	1.24%**	1.74%**	0.65%	1.08%
P-Value	(0.030)	(0.012)	(0.673)	(0.165)

Table 5: Five-Day CARs by Firm Valuation

This table reports the short-run five-day (-2,+2) cumulative abnormal returns (CARs) for the samples at announcement (DA) and outcome (DO), which is either the date of effective completion (DE) or the date of effective withdrawal (DW) for the successful and failed samples respectively by firm valuation. We measure the CARs using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The Overall sample contains all deals in the full dataset. The Successful sample contains all deals which were subsequently completed so that the acquirer gained control of the target with a holding of +51%. The Failed All sample contains all deals which were subsequently withdrawn so that the acquirer did not gain control of the target. The Failed Exogenous sample contains all deals which failed for reasons exogenous to acquirer. For all samples, we examine those deals for which the acquirer was either over or undervalued during the acquisition process. The included deals in the overvalued (undervalued) sample are those in which the acquirer is classified as overvalued (undervalued). The acquirer's P/E on the month of announcement is compared with a historical firm P/E average of 24 months (-12,+12) around the deal announcement. If the announcement month P/E is higher (lower) than the historical average, the firm is classified as highly-valued (valued-low). We then take the top (bottom) 30% of these firms as Overvalued (Undervalued). Cash deals refer to those which were financed 100% using cash. Stock deals refer to those which were financed 100% using equity. Mixed deals refer to those deals with known information confirming that the deal was financed using equity and cash. We control for the different sample sizes using STATA in Panel's E and F. The P-value is shown in parentheses. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	Overvalued				Undervalued				Differential: Overvalued - Undervalued			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Panel A: Overall												
Mean DA	0.69%***	0.88%***	-0.05%	0.63%***	1.26%***	1.43%***	0.90%	1.18%***	-0.57%***	-0.55%**	-0.95%	-0.54%
P-Value	(0.000)	(0.000)	(0.938)	(0.000)	(0.000)	(0.000)	(0.378)	(0.000)	(0.001)	(0.044)	(0.430)	(0.018)
Mean DO	0.45%***	0.32%*	0.18%	0.55%***	1.01%***	1.18%***	1.10%	0.90%***	-0.56%***	-0.86%***	-0.93%	-0.35%
P-Value	(0.000)	(0.054)	(0.778)	(0.000)	(0.000)	(0.000)	(0.108)	(0.000)	(0.000)	(0.001)	(0.316)	(0.071)
N	1938	684	78	1176	2404	897	73	1434				
Panel B: Successful												
Mean DA	0.71%***	0.91%***	-0.31%	0.66%***	1.35%***	1.49%***	1.19%	1.28%***	-0.64%***	-0.58%**	-1.50%	-0.61%***
P-Value	(0.000)	(0.000)	(0.631)	(0.000)	(0.000)	(0.000)	(0.292)	(0.000)	(0.000)	(0.037)	(0.248)	(0.009)
Mean DE	0.44%***	0.35%**	-0.20%	0.53%***	1.06%***	1.21%***	1.17%*	0.95%***	-0.62%***	-0.86%***	-1.37%	-0.42%**
P-Value	(0.000)	(0.036)	(0.668)	(0.000)	(0.000)	(0.000)	(0.100)	(0.000)	(0.000)	(0.001)	(0.106)	(0.037)
N	1855	668	69	1118	2305	876	64	1365				
Panel C: Failed All												
Mean DA	0.16%	-0.34%	1.94%	0.02%	-0.91%	-1.04%	-1.16%	-0.83%	1.07%	0.70%	3.10%	0.85%
P-Value	(0.743)	(0.614)	(0.475)	(0.968)	(0.103)	(0.405)	(0.598)	(0.205)	(0.149)	(0.619)	(0.368)	(0.317)
Mean DW	0.82%	-0.93%	3.04%	0.95%	0.00%	-0.10%	0.61%	-0.05%	0.82%	-0.83%	2.43%	1.00%
P-Value	(0.227)	(0.493)	(0.488)	(0.132)	(0.999)	(0.905)	(0.808)	(0.916)	(0.306)	(0.595)	(0.624)	(0.205)
N	83	16	9	58	99	21	9	69				
Panel D: Failed Exogenous												
Mean DA	0.13%	-0.01%	-1.79%*	1.20%	-1.41%*	-0.36%	1.67%	-2.65%**	1.54%	0.35%	-3.46%	3.85%**
P-Value	(0.838)	(0.988)	(0.065)	(0.251)	(0.064)	(0.554)	(0.740)	(0.026)	(0.119)	(0.746)	(0.508)	(0.014)
Mean DW	-0.10%	-1.52%	1.28%	-0.06%	0.14%	-0.32%	-2.09%	0.00%	-0.24%	-1.20%	3.37%	-0.06%
P-Value	(0.893)	(0.139)	(0.778)	(0.911)	(0.831)	(0.653)	(0.583)	(0.999)	(0.812)	(0.313)	(0.557)	(0.957)
N	44	9	7	24	46	11	4	20				
Panel E: Successful – Failed All												
Diff DA	0.55%	1.25%*	-2.25%	0.64%	2.26%***	2.53%*	2.35%	2.11%***				
P-Value	(0.274)	(0.087)	(0.421)	(0.268)	(0.000)	(0.055)	(0.343)	(0.002)				
Diff DO	-0.38%	1.28%	-3.24%	-0.42%	1.06%**	1.31%	0.56%	1.00%**				
P-Value	(0.578)	(0.353)	(0.464)	(0.511)	(0.019)	(0.127)	(0.830)	(0.049)				
Panel F: Successful – Failed Exogenous												
Diff DA	0.58%	0.92%	1.48%	-0.37%	2.76%***	1.85%**	-0.48%	4.24%***				
P-Value	(0.374)	(0.329)	(0.167)	(0.723)	(0.001)	(0.011)	(0.925)	(0.001)				
Diff DO	0.54%	1.87%*	-1.48%	0.79%	0.92%	1.53%*	3.26%	1.16%				
P-Value	(0.480)	(0.080)	(0.746)	(0.167)	(0.121)	(0.055)	(0.413)	(0.260)				

Table 6: Three-Day CARs by Firm Valuation

This table reports the short-run three-day (-1,+1) cumulative abnormal returns (CARs) for the samples at announcement (DA) and outcome (DO), which is either the date of effective completion (DE) or the date of effective withdrawal (DW) for the successful and failed samples respectively by firm valuation. We measure the CARs using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The Overall sample contains all deals in the full dataset. The Successful sample contains all deals which were subsequently completed so that the acquirer gained control of the target with a holding of +51%. The Failed All sample contains all deals which were subsequently withdrawn so that the acquirer did not gain control of the target. The Failed Exogenous sample contains all deals which failed for reasons exogenous to acquirer. For all samples, we examine those deals for which the acquirer was either over or undervalued during the acquisition process. The included deals in the overvalued (undervalued) sample are those in which the acquirer is classified as overvalued (undervalued). The acquirer's P/E on the month of announcement is compared with a historical firm P/E average of 24 months (-12,+12) around the deal announcement. If the announcement month P/E is higher (lower) than the historical average, the firm is classified as highly-valued (valued-low). We then take the top (bottom) 30% of these firms as Overvalued (Undervalued). Cash deals refer to those which were financed 100% using cash. Stock deals refer to those which were financed 100% using equity. Mixed deals refer to those deals with known information confirming that the deal was financed using equity and cash. We control for the different sample sizes using STATA in Panel's E and F. The P-value is shown in parentheses. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	Overvalued				Undervalued				Differential: Overvalued - Undervalued			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Panel A: Overall												
Mean DA	0.52%***	0.69%***	-0.09%	0.46%***	1.00%****	1.02%***	1.30%	0.97%***	-0.48%***	-0.33%	-1.40%	-0.51%***
P-Value	(0.000)	(0.000)	(0.875)	(0.001)	(0.000)	(0.000)	(0.164)	(0.000)	(0.001)	(0.131)	(0.206)	(0.008)
Mean DO	0.34%***	0.29%**	-0.55%	0.42%***	0.78%***	0.78%***	1.23%***	0.76%***	-0.44%***	-0.49%**	-1.78%***	-0.33%**
P-Value	(0.000)	(0.022)	(0.107)	(0.000)	(0.000)	(0.000)	(0.022)	(0.000)	(0.000)	(0.011)	(0.005)	(0.037)
N	1938	684	78	1176	2404	897	73	1434				
Panel B: Successful												
Mean DA	0.55%***	0.71%***	-0.31%	0.50%***	1.06%***	1.06%***	1.67%	1.03%***	-0.52%***	-0.35%	-1.98%*	-0.53%***
P-Value	(0.000)	(0.000)	(0.590)	(0.000)	(0.000)	(0.000)	(0.108)	(0.000)	(0.001)	(0.107)	(0.095)	(0.007)
Mean DE	0.34%***	0.32%**	-0.45%	0.39%***	0.82%***	0.82%***	1.36%***	0.80%***	-0.49%***	-0.50%**	-1.80%***	-0.41%**
P-Value	(0.000)	(0.012)	(0.167)	(0.001)	(0.000)	(0.000)	(0.013)	(0.000)	(0.000)	(0.012)	(0.004)	(0.012)
N	1855	668	69	1118	2305	876	64	1365				
Panel C: Failed All												
Mean DA	-0.01%	0.02%	1.56%	-0.27%	-0.48%	-0.79%	-1.34%	-0.27%	0.46%	0.81%	2.90%	0.00%
P-Value	(0.977)	(0.981)	(0.588)	(0.604)	(0.239)	(0.455)	(0.424)	(0.548)	(0.457)	(0.510)	(0.381)	(0.996)
Mean DW	0.38%	-1.02%	-1.32%	1.03%	-0.22%	-0.65%	0.34%	-0.16%	0.60%	-0.37%	-1.65%	1.19%*
P-Value	(0.422)	(0.329)	(0.444)	(0.066)	(0.511)	(0.447)	(0.876)	(0.610)	(0.300)	(0.780)	(0.543)	(0.064)
N	83	16	9	58	99	21	9	69				
Panel D: Failed Exogenous												
Mean DA	0.09%	0.16%	-1.71%	0.92%	-0.88%	0.69%	-0.10%	-1.75%**	0.97%	-0.53%	-1.61%	2.67%**
P-Value	(0.874)	(0.838)	(0.108)	(0.318)	(0.105)	(0.281)	(0.981)	(0.023)	(0.212)	(0.588)	(0.699)	(0.025)
Mean DW	-0.44%	-1.41%	-0.85%	-0.03%	-0.11%	-0.71%	-1.83%	-0.02%	-0.33%	-0.70%	0.98%	-0.01%
P-Value	(0.351)	(0.271)	(0.698)	(0.941)	(0.810)	(0.270)	(0.563)	(0.983)	(0.607)	(0.612)	(0.789)	(0.984)
N	44	9	7	24	46	11	4	20				
Panel E: Successful – Failed All												
Diff DA	0.56%	0.69%	-1.87%	0.77%	1.54%***	1.85%*	3.01%	1.30%***				
P-Value	(0.250)	(0.290)	(0.527)	(0.151)	(0.000)	(0.092)	(0.132)	(0.006)				
Diff DO	-0.04%	1.34%	0.87%	-0.64%	1.04%***	1.46%*	1.02%	0.97%***				
P-Value	(0.926)	(0.208)	(0.615)	(0.262)	(0.003)	(0.099)	(0.648)	(0.006)				
Panel E: Successful – Failed Exogenous												
Diff DA	0.45%	0.55%	1.40%	-0.30%	1.94%***	0.37%	1.77%	3.08%***				
P-Value	(0.426)	(0.491)	(0.217)	(0.747)	(0.001)	(0.571)	(0.673)	(0.000)				
Diff DO	0.77%	1.73%	0.40%	0.51%	0.93%**	1.53%	3.19%	1.03%				
P-Value	(0.109)	(0.186)	(0.855)	(0.265)	(0.045)	(0.033)	(0.344)	(0.163)				

Table 7: Five-Day CARs by Market Valuation

This table reports the short-run five-day (-2,+2) cumulative abnormal returns (CARs) for the samples at announcement (DA) and outcome (DO), which is either the date of effective completion (DE) or the date of effective withdrawal (DW) for the successful and failed samples respectively by market valuation. We measure the CARs using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The Overall sample contains all deals in the full dataset. The Successful sample contains all deals which were subsequently completed so that the acquirer gained control of the target with a holding of +51%. The Failed All sample contains all deals which were subsequently withdrawn so that the acquirer did not gain control of the target. The Failed Exogenous sample contains all deals which failed for reasons exogenous to acquirer. For classification of the market's valuation, please see the Data and Methodology section or the source work by Bouwman, Fuller and Nain (2009). Cash deals refer to those which were financed 100% using cash. Stock deals refer to those which were financed 100% using equity. Mixed deals refer to those deals with known information confirming that the deal was financed using equity and cash. We control for the different sample sizes using STATA in Panel's E and F. The P-value is shown in parentheses. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	High Valuation				Low Valuation				Differential: High Valuation – Low Valuation			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Panel A: Overall												
Mean DA	1.44%***	1.67%***	1.14%	1.35%***	0.40%*	0.75%**	-0.37%	0.25%	1.05%***	0.92%**	1.51%	1.09%***
P-Value	(0.000)	(0.000)	(0.192)	(0.000)	(0.064)	(0.011)	(0.796)	(0.381)	(0.000)	(0.021)	(0.367)	(0.002)
Mean DO	0.84%***	0.99%***	1.09%	0.74%***	0.14%	0.48%	0.15%	-0.05%	0.70%***	0.51%	0.94%	0.80%**
P-Value	(0.000)	(0.000)	(0.104)	(0.000)	(0.519)	(0.102)	(0.872)	(0.857)	(0.006)	(0.188)	(0.422)	(0.022)
N	1816	583	81	1152	1057	360	45	652				
Panel B: Successful												
Mean DA	1.48%***	1.69%***	1.16%	1.39%***	0.48%**	0.79%***	-0.37%	0.36%	1.00%***	0.90%**	1.53%	1.04%***
P-Value	(0.000)	(0.000)	(0.223)	(0.000)	(0.028)	(0.008)	(0.819)	(0.229)	(0.000)	(0.026)	(0.411)	(0.004)
Mean DE	0.89%***	1.03%***	1.23%*	0.79%***	0.30%	0.48%	-0.26%	0.23%	0.59%**	0.55%	1.49%	0.56%*
P-Value	(0.000)	(0.000)	(0.071)	(0.000)	(0.138)	(0.108)	(0.800)	(0.398)	(0.016)	(0.158)	(0.229)	(0.084)
N	1729	570	72	1087	1025	354	40	631				
Panel C: Failed All												
Mean DA	0.68%	0.81%	0.98%	0.61%	-2.24%**	-1.77%	-0.39%	-2.82%**	2.92%***	2.58%	1.36%	3.43%**
P-Value	(0.295)	(0.612)	(0.656)	(0.424)	(0.017)	(0.457)	(0.815)	(0.025)	(0.010)	(0.360)	(0.612)	(0.018)
Mean DW	-0.12%	-0.78%	-0.02%	0.00%	-4.96%*	0.64%	3.48%	-8.58%**	4.85%	-1.42%	-3.50%	8.58%*
P-Value	(0.890)	(0.542)	(0.995)	(0.997)	(0.096)	(0.774)	(0.159)	(0.052)	(0.116)	(0.577)	(0.322)	(0.057)
N	87	13	9	65	32	6	5	21				
Panel D: Failed Exogenous												
Mean DA	1.10%	1.25%	2.48%	0.74%	-2.34%	-0.23%	2.36%	-3.58%*	3.44%**	1.48%	0.12%	4.32%**
P-Value	(0.235)	(0.193)	(0.347)	(0.527)	(0.105)	(0.422)	(0.308)	(0.059)	(0.044)	(0.139)	(0.965)	(0.046)
Mean DW	-1.18%	0.25%	-2.28%	-1.15%	-0.41%	-0.10%	0.59%	-0.65%	-0.77%	0.35%	-2.87%	-0.50%
P-Value	(0.426)	(0.839)	(0.465)	(0.559)	(0.676)	(0.973)	(0.914)	(0.582)	(0.664)	(0.907)	(0.637)	(0.825)
N	41	5	7	29	15	2	2	11				
Panel E: Successful – Failed All												
Diff DA	0.80%	0.88%	0.19%	0.79%	2.72%***	2.56%	0.02%	3.18%**				
P-Value	(0.227)	(0.588)	(0.936)	(0.320)	(0.005)	(0.298)	(0.994)	(0.014)				
Diff DO	1.00%	1.81%	1.25%	0.78%	5.26%*	-0.16%	-3.75%	8.81%**				
P-Value	(0.238)	(0.177)	(0.667)	(0.455)	(0.079)	(0.944)	(0.146)	(0.047)				
Panel F: Successful – Failed Exogenous												
Diff DA	0.38%	0.44%	-1.32%	0.65%	2.82%*	1.02%**	-2.73%	3.94%**				
P-Value	(0.683)	(0.622)	(0.627)	(0.583)	(0.057)	(0.011)	(0.221)	(0.042)				
Diff DO	2.07%	0.78%	3.51%	1.94%	0.71%	0.58%	-0.85%	0.88%				
P-Value	(0.168)	(0.546)	(0.282)	(0.330)	(0.482)	(0.842)	(0.877)	(0.469)				

Table 8: Three-Day CARs by Market Valuation

This table reports the short-run three-day (-1,+1) cumulative abnormal returns (CARs) for the samples at announcement (DA) and outcome (DO), which is either the date of effective completion (DE) or the date of effective withdrawal (DW) for the successful and failed samples respectively by market valuation. We measure the CARs using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The Overall sample contains all deals in the full dataset. The Successful sample contains all deals which were subsequently completed so that the acquirer gained control of the target with a holding of +51%. The Failed All sample contains all deals which were subsequently withdrawn so that the acquirer did not gain control of the target. The Failed Exogenous sample contains all deals which failed for reasons exogenous to acquirer. For classification of the market's valuation, please see the Data and Methodology section or the source work by Bouwman, Fuller and Nain (2009). Cash deals refer to those which were financed 100% using cash. Stock deals refer to those which were financed 100% using equity. Mixed deals refer to those deals with known information confirming that the deal was financed using equity and cash. We control for the different sample sizes using STATA in Panel's E and F. The P-value is shown in parentheses. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	High Valuation				Low Valuation				Differential: High Valuation – Low Valuation			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Panel A: Overall												
Mean DA	1.24%***	1.39%***	1.25%	1.17%***	0.35%**	0.55%**	0.01%	0.27%	0.89%***	0.85%**	1.24%	0.89%***
P-Value	(0.000)	(0.000)	(0.120)	(0.000)	(0.043)	(0.028)	(0.993)	(0.243)	(0.000)	(0.013)	(0.405)	(0.002)
Mean DO	0.76%***	0.83%***	0.67%	0.72%***	0.09%	0.31%	0.50%	-0.06%	0.66%***	0.52%*	0.18%	0.78%***
P-Value	(0.000)	(0.000)	(0.164)	(0.000)	(0.619)	(0.184)	(0.571)	(0.816)	(0.002)	(0.095)	(0.859)	(0.008)
N	1816	583	81	1152	1057	360	45	652				
Panel B: Successful												
Mean DA	1.28%***	1.43%***	1.30%	1.21%***	0.41%**	0.56%**	0.06%	0.35%	0.87%***	0.87%**	1.24%	0.85%***
P-Value	(0.000)	(0.000)	(0.140)	(0.000)	(0.020)	(0.025)	(0.965)	(0.137)	(0.000)	(0.011)	(0.454)	(0.004)
Mean DE	0.80%***	0.86%***	0.75%	0.77%***	0.25%	0.32%	0.19%	0.21%	0.55%***	0.54%*	0.56%	0.55%**
P-Value	(0.000)	(0.000)	(0.120)	(0.000)	(0.116)	(0.168)	(0.845)	(0.320)	(0.005)	(0.086)	(0.596)	(0.032)
N	1729	570	72	1087	1025	354	40	631				
Panel C: Failed All												
Mean DA	0.43%	-0.22%	0.83%	0.51%	-1.55%*	-0.39%	-0.40%	-2.16%*	1.99%*	0.17%	1.23%	2.67%*
P-Value	(0.385)	(0.870)	(0.635)	(0.374)	(0.094)	(0.862)	(0.802)	(0.085)	(0.058)	(0.948)	(0.595)	(0.052)
Mean DW	-0.05%	-0.60%	0.06%	0.04%	-5.05%	-0.44%	2.98%	-8.27%*	5.00%	-0.16%	-2.92%	8.32%*
P-Value	(0.944)	(0.621)	(0.977)	(0.964)	(0.111)	(0.865)	(0.202)	(0.080)	(0.124)	(0.124)	(0.333)	(0.084)
N	87	13	9	65	32	6	5	21				
Panel D: Failed Exogenous												
Mean DA	0.62%	0.49%	1.75%	0.37%	-1.43%	2.10%	2.59%	-2.80%	2.05%	-1.61%	-0.84%	3.17%*
P-Value	(0.418)	(0.612)	(0.428)	(0.701)	(0.291)	(0.609)	(0.457)	(0.093)	(0.186)	(0.684)	(0.802)	(0.092)
Mean DW	-1.30%	0.25%	-2.07%	-1.38%	0.01%	-1.23%	0.99%	0.06%	-1.31%	1.48%	-3.06%	-1.44%
P-Value	(0.332)	(0.855)	(0.353)	(0.450)	(0.986)	(0.422)	(0.855)	(0.940)	(0.389)	(0.405)	(0.603)	(0.469)
N	41	5	7	29	15	2	2	11				
Panel E: Successful - Failed All												
Diff DA	0.85%	1.65%	0.47%	0.70%	1.97%**	0.95%	0.46%	2.52%*				
P-Value	(0.102)	(0.245)	(0.808)	(0.245)	(0.039)	(0.676)	(0.825)	(0.051)				
Diff DO	0.85%	1.46%	0.69%	0.72%	5.30%*	0.77%	-2.79%	8.49%*				
P-Value	(0.263)	(0.248)	(0.758)	(0.445)	(0.096)	(0.770)	(0.245)	(0.074)				
Panel F: Successful - Failed Exogenous												
Diff DA	0.66%	0.94%	-0.45%	0.84%	1.84%	-1.54%	-2.53%	3.15%*				
P-Value	(0.395)	(0.360)	(0.846)	(0.396)	(0.182)	(0.696)	(0.447)	(0.064)				
Diff DO	2.10%	0.61%	2.82%	2.15%	0.24%	1.55%	-0.80%	0.15%				
P-Value	(0.122)	(0.666)	(0.225)	(0.245)	(0.756)	(0.340)	(0.882)	(0.858)				

Table 9: Five-Day CARs by Firm Valuation in High-Valuation Months

This table reports the short-run five-day (-2,+2) cumulative abnormal returns (CARs) for the samples at announcement (DA) and outcome (DO), which is either the date of effective completion (DE) or the date of effective withdrawal (DW) for the successful and failed samples respectively by firm valuation in high-valuation months. We measure the CARs using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The Overall sample contains all deals in the full dataset. The Successful sample contains all deals which were subsequently completed so that the acquirer gained control of the target with a holding of +51%. The Failed All sample contains all deals which were subsequently withdrawn so that the acquirer did not gain control of the target. The Failed Exogenous sample contains all deals which failed for reasons exogenous to acquirer. For all samples, we examine those deals for which the acquirer was either over or undervalued during the acquisition process. The included deals in the overvalued (undervalued) sample are those in which the acquirer is classified as overvalued (undervalued). The acquirer's P/E on the month of announcement is compared with a historical firm P/E average of 24 months (-12,+12) around the deal announcement. If the announcement month P/E is higher (lower) than the historical average, the firm is classified as highly-valued (valued-low). We then take the top (bottom) 30% of these firms as Overvalued (Undervalued). For classification of the market's valuation, please see the Data and Methodology section or the source work by Bouwman, Fuller and Nain (2009). Cash deals refer to those which were financed 100% using cash. Stock deals refer to those which were financed 100% using equity. Mixed deals refer to those deals with known information confirming that the deal was financed using equity and cash. We control for the different sample sizes using STATA in Panel's E and F. The P-value is shown in parentheses. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	Overvalued				Undervalued				Differential: Overvalued - Undervalued			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Panel A: Overall												
Mean DA	0.75%***	0.63%**	0.87%	0.82%***	1.75%***	2.16%***	2.34%	1.50%***	-0.99%***	-1.53%***	-1.47%	-0.68%*
P-Value	(0.000)	(0.027)	(0.521)	(0.000)	(0.000)	(0.000)	(0.193)	(0.000)	(0.001)	(0.003)	(0.509)	(0.078)
Mean DO	0.27%	-0.05%	-0.49%	0.47%**	1.31%***	1.77%***	1.95%*	1.04%***	-1.05%***	-1.82%***	-2.44%*	-0.57%*
P-Value	(0.102)	(0.844)	(0.535)	(0.030)	(0.000)	(0.000)	(0.057)	(0.000)	(0.000)	(0.000)	(0.057)	(0.072)
N	748	254	19	475	779	258	29	492				
Panel B: Successful												
Mean DA	0.72%***	0.62%**	1.17%	0.76%***	1.88%***	2.20%***	2.64%	1.66%***	-1.16%***	-1.59%***	-1.47%	-0.90%**
P-Value	(0.000)	(0.034)	(0.437)	(0.001)	(0.000)	(0.000)	(0.184)	(0.000)	(0.000)	(0.002)	(0.549)	(0.024)
Mean DE	0.26%	0.00%	-0.24%	0.43%**	1.33%***	1.78%***	2.19%**	1.05%***	-1.07%***	-1.78%***	-2.42%**	-0.62%*
P-Value	(0.109)	(0.994)	(0.747)	(0.050)	(0.000)	(0.000)	(0.026)	(0.000)	(0.000)	(0.000)	(0.046)	(0.059)
N	709	248	17	444	743	252	25	466				
Panel C: Failed All												
Mean DA	1.40%**	1.09%	-1.69%	1.66%**	-0.94%	0.15%	0.43%	-1.40%	2.33%*	0.95%	-2.12%	3.05%**
P-Value	(0.029)	(0.204)	(0.475)	(0.035)	(0.412)	(0.968)	(0.928)	(0.271)	(0.075)	(0.798)	(0.681)	(0.041)
Mean DW	0.32%	-2.22%	-2.60%	1.00%	0.92%	1.21%	0.51%	0.92%	-0.61%	-3.43%	-3.12%	0.08%
P-Value	(0.729)	(0.330)	(0.692)	(0.342)	(0.283)	(0.460)	(0.921)	(0.332)	(0.629)	(0.212)	(0.694)	(0.956)
N	39	6	2	31	36	6	4	26				
Panel D: Failed Exogenous												
Mean DA	2.02%*	0.75%	-1.69%	3.33%**	-0.92%	1.99%**	5.17%	-2.17%	2.94%	-1.24%	-6.86%	5.50%***
P-Value	(0.081)	(0.633)	(0.475)	(0.030)	(0.599)	(0.030)	(0.650)	(0.141)	(0.160)	(0.453)	(0.564)	(0.009)
Mean DW	-0.39%	-0.75%	-2.60%	-0.29%	0.85%	1.75%*	-6.89%	1.44%	-1.24%	-2.50%	4.28%	-1.73%
P-Value	(0.587)	(0.718)	(0.693)	(0.697)	(0.538)	(0.081)	(0.358)	(0.445)	(0.424)	(0.299)	(0.584)	(0.391)
N	20	3	2	14	15	2	2	8				
Panel E: Successful – Failed All												
Diff DA	-0.68%	-0.47%	2.86%	-0.90%	2.81%**	2.06%	2.21%	3.06%**				
P-Value	(0.296)	(0.575)	(0.275)	(0.259)	(0.020)	(0.577)	(0.670)	(0.024)				
Diff DO	-0.06%	2.23%	2.36%	-0.57%	0.41%	0.58%	1.67%	0.12%				
P-Value	(0.953)	(0.333)	(0.720)	(0.594)	(0.642)	(0.727)	(0.752)	(0.900)				
Panel F: Successful – Failed Exogenous												
Diff DA	-1.30%	-0.13%	2.86%	-2.45%	2.80%	0.21%	-2.53%	4.39%**				
P-Value	(0.255)	(0.932)	(0.265)	(0.102)	(0.128)	(0.625)	(0.819)	(0.013)				
Diff DO	0.65%	0.75%	2.36%	0.88%	0.48%	0.03%	9.07%	-0.16%				
P-Value	(0.378)	(0.719)	(0.717)	(0.283)	(0.732)	(0.953)	(0.290)	(0.933)				

Table 10: Three-Day CARs by Firm Valuation in High-Valuation Months

This table reports the short-run three-day (-1,+1) cumulative abnormal returns (CARs) for the samples at announcement (DA) and outcome (DO), which is either the date of effective completion (DE) or the date of effective withdrawal (DW) for the successful and failed samples respectively by firm valuation in high-valuation months. We measure the CARs using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The Overall sample contains all deals in the full dataset. The Successful sample contains all deals which were subsequently completed so that the acquirer gained control of the target with a holding of +51%. The Failed All sample contains all deals which were subsequently withdrawn so that the acquirer did not gain control of the target. The Failed Exogenous sample contains all deals which failed for reasons exogenous to acquirer. For all samples, we examine those deals for which the acquirer was either over or undervalued during the acquisition process. The included deals in the overvalued (undervalued) sample are those in which the acquirer is classified as overvalued (undervalued). The acquirer's P/E on the month of announcement is compared with a historical firm P/E average of 24 months (-12,+12) around the deal announcement. If the announcement month P/E is higher (lower) than the historical average, the firm is classified as highly-valued (valued-low). We then take the top (bottom) 30% of these firms as Overvalued (Undervalued). For classification of the market's valuation, please see the Data and Methodology section or the source work by Bouwman, Fuller and Nain (2009). Cash deals refer to those which were financed 100% using cash. Stock deals refer to those which were financed 100% using equity. Mixed deals refer to those deals with known information confirming that the deal was financed using equity and cash. We control for the different sample sizes using STATA in Panel's E and F. The P-value is shown in parentheses. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	Overvalued				Undervalued				Differential: Overvalued - Undervalued			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Panel A: Overall												
Mean DA	0.59%***	0.48%**	1.23%	0.62%***	1.52%***	1.81%***	2.57%	1.30%***	-0.93%***	-1.33%***	-1.35%	-0.68%**
P-Value	(0.000)	(0.023)	(0.362)	(0.002)	(0.000)	(0.000)	(0.132)	(0.000)	(0.000)	(0.002)	(0.527)	(0.031)
Mean DO	0.27%**	0.08%	-0.70%	0.41%**	1.10%***	1.38%***	1.68%**	0.92%***	-0.83%***	-1.30%***	-2.38%**	-0.51%**
P-Value	(0.039)	(0.681)	(0.273)	(0.020)	(0.000)	(0.000)	(0.043)	(0.000)	(0.000)	(0.001)	(0.022)	(0.048)
N	748	254	19	475	779	258	29	492				
Panel B: Successful												
Mean DA	0.57%***	0.47%**	1.51%	0.58%***	1.62%***	1.88%***	3.06%	1.41%***	-1.06%***	-1.41%***	-1.55%	-0.83%**
P-Value	(0.000)	(0.027)	(0.311)	(0.004)	(0.000)	(0.000)	(0.115)	(0.000)	(0.000)	(0.001)	(0.517)	(0.012)
Mean DE	0.25%*	0.11%	-0.48%	0.35%**	1.13%***	1.40%***	1.74%**	0.95%***	-0.88%***	-1.28%***	-2.22%**	-0.60%**
P-Value	(0.058)	(0.550)	(0.417)	(0.049)	(0.000)	(0.000)	(0.027)	(0.000)	(0.000)	(0.001)	(0.022)	(0.023)
N	709	248	17	444	743	252	25	466				
Panel C: Failed All												
Mean DA	0.95%	0.71%	-1.23%	1.13%	-0.69%	-1.17%	-0.47%	-0.61%	1.64%*	1.88%	-0.75%	1.74%
P-Value	(0.128)	(0.510)	(0.550)	(0.135)	(0.370)	(0.696)	(0.871)	(0.442)	(0.097)	(0.552)	(0.821)	(0.110)
Mean DW	0.70%	-1.37%	-2.58%	1.31%	0.55%	0.69%	1.28%	0.40%	0.15%	-2.05%	-3.86%	0.90%
P-Value	(0.419)	(0.566)	(0.640)	(0.178)	(0.364)	(0.615)	(0.763)	(0.488)	(0.888)	(0.447)	(0.564)	(0.419)
N	39	6	2	31	36	6	4	26				
Panel D: Failed Exogenous												
Mean DA	1.64%*	-0.30%	-1.23%	2.70%**	-1.36%	1.68%	1.44%	-2.26%*	3.00%*	-1.98%	-2.66%	4.96%***
P-Value	(0.097)	(0.840)	(0.550)	(0.044)	(0.278)	(0.238)	(0.850)	(0.080)	(0.059)	(0.278)	(0.733)	(0.007)
Mean DW	-0.46%	-0.59%	-2.58%	-0.36%	0.51%	1.52%	-4.97%	0.92%	-0.97%	-2.11%	2.39%	-1.28%
P-Value	(0.467)	(0.804)	(0.640)	(0.556)	(0.619)	(0.380)	(0.395)	(0.491)	(0.420)	(0.437)	(0.702)	(0.382)
N	20	3	2	14	15	2	2	8				
Panel E: Successful – Failed All												
Diff DA	-0.38%	-0.24%	2.74%	-0.55%	2.31%***	3.05%	3.53%	2.02%**				
P-Value	(0.546)	(0.823)	(0.271)	(0.476)	(0.005)	(0.332)	(0.322)	(0.020)				
Diff DO	-0.45%	1.48%	2.10%	-0.96%	0.58%	0.71%	0.46%	0.54%				
P-Value	(0.604)	(0.536)	(0.699)	(0.326)	(0.358)	(0.617)	(0.915)	(0.378)				
Panel F: Successful – Failed Exogenous												
Diff DA	-1.07%	0.77%	2.74%	-2.11%	2.98%**	0.20%	1.62%	4.19%***				
P-Value	(0.272)	(0.618)	(0.253)	(0.112)	(0.029)	(0.833)	(0.838)	(0.007)				
Diff DO	0.71%	0.70%	2.10%	0.74%	0.61%	-0.12%	6.71%	0.37%				
P-Value	(0.277)	(0.768)	(0.696)	(0.266)	(0.559)	(0.930)	(0.315)	(0.783)				

Table 11: Five-Day CARs by Firm Valuation in Low-Valuation Months

This table reports the short-run five-day (-2,+2) cumulative abnormal returns (CARs) for the samples at announcement (DA) and outcome (DO), which is either the date of effective completion (DE) or the date of effective withdrawal (DW) for the successful and failed samples respectively by firm valuation in low-valuation months. We measure the CARs using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The Overall sample contains all deals in the full dataset. The Successful sample contains all deals which were subsequently completed so that the acquirer gained control of the target with a holding of +51%. The Failed All sample contains all deals which were subsequently withdrawn so that the acquirer did not gain control of the target. The Failed Exogenous sample contains all deals which failed for reasons exogenous to acquirer. For all samples, we examine those deals for which the acquirer was either over or undervalued during the acquisition process. The included deals in the overvalued (undervalued) sample are those in which the acquirer is classified as overvalued (undervalued). The acquirer's P/E on the month of announcement is compared with a historical firm P/E average of 24 months (-12,+12) around the deal announcement. If the announcement month P/E is higher (lower) than the historical average, the firm is classified as highly-valued (valued-low). We then take the top (bottom) 30% of these firms as Overvalued (Undervalued). For classification of the market's valuation, please see the Data and Methodology section or the source work by Bouwman, Fuller and Nain (2009). Cash deals refer to those which were financed 100% using cash. Stock deals refer to those which were financed 100% using equity. Mixed deals refer to those deals with known information confirming that the deal was financed using equity and cash. We control for the different sample sizes using STATA in Panel's E and F. The P-value is shown in parentheses. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	Overvalued				Undervalued				Differential: Overvalued - Undervalued			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Panel A: Overall												
Mean DA	0.56%	1.79%***	-1.43%	0.07%	0.48%*	0.12%	1.55%	0.70%*	0.08%	1.67%***	-2.99%	-0.63%
P-Value	(0.123)	(0.000)	(0.417)	(0.889)	(0.097)	(0.772)	(0.657)	(0.073)	(0.867)	(0.007)	(0.444)	(0.325)
Mean DO	0.30%	0.84%*	-1.82%**	0.18%	0.53%**	0.58%	0.96%	0.48%	-0.24%	0.25%	-2.78%	-0.30%
P-Value	(0.377)	(0.073)	(0.034)	(0.708)	(0.039)	(0.152)	(0.538)	(0.166)	(0.578)	(0.679)	(0.120)	(0.609)
N	294	96	14	184	491	203	13	275				
Panel B: Successful												
Mean DA	0.63%*	1.85%***	-1.63%	0.15%	0.54%*	0.16%	2.47%	0.75%*	0.09%	1.69%***	-4.10%	-0.60%
P-Value	(0.091)	(0.000)	(0.392)	(0.774)	(0.067)	(0.699)	(0.589)	(0.057)	(0.856)	(0.007)	(0.407)	(0.352)
Mean DE	0.35%	0.85%*	-1.67%*	0.23%	0.53%**	0.57%	-0.04%	0.52%	-0.18%	0.28%	-1.63%	-0.29%
P-Value	(0.312)	(0.073)	(0.062)	(0.635)	(0.045)	(0.161)	(0.984)	(0.142)	(0.674)	(0.655)	(0.437)	(0.630)
N	287	94	13	180	476	199	10	267				
Panel C: Failed All												
Mean DA	-2.20%*	-1.42%	1.12%	-3.41%**	-1.40%	-1.95%	-1.48%	-1.10%	-0.80%	0.53%	2.60%	-2.32%
P-Value	(0.060)	(0.690)	-	(0.015)	(0.401)	(0.596)	(0.619)	(0.686)	(0.675)	(0.909)	-	(0.416)
Mean DW	-1.79%**	0.02%	-3.76%	-2.20%**	0.62%	0.95%	4.30%**	-0.93%	-2.41%*	-0.94%	-8.06%	-1.27%
P-Value	(0.049)	(0.994)	-	(0.046)	(0.561)	(0.789)	(0.030)	(0.278)	(0.073)	(0.816)	-	(0.249)
N	7	2	1	4	15	4	3	8				
Panel D: Failed Exogenous												
Mean DA	-2.70%	-	1.12%	-3.97%**	-1.47%	-0.23%	3.60%	-3.37%	-1.23%	-	-2.48%	-0.61%
P-Value	(0.135)	-	-	(0.017)	(0.620)	(0.422)	-	(0.543)	(0.704)	-	-	(0.910)
Mean DW	-2.80%**	-	-3.76%	-2.48%	0.26%	-0.10%	4.95%	-0.73%	-3.06%**	-	-8.70%	-1.75%
P-Value	(0.027)	-	-	(0.102)	(0.830)	(0.973)	-	(0.608)	(0.050)	-	-	(0.311)
N	4	0	1	3	7	2	1	4				
Panel E: Successful – Failed All												
Diff DA	2.82%**	3.27%	-2.75%	3.56%***	1.94%	2.11%	3.94%	1.85%				
P-Value	(0.028)	(0.441)	-	(0.004)	(0.257)	(0.570)	(0.455)	(0.505)				
Diff DO	2.14%**	0.84%	2.09%	2.44%**	-0.09%	-0.38%	-4.34%*	1.45%				
P-Value	(0.029)	(0.721)	-	(0.026)	(0.937)	(0.916)	(0.057)	(0.125)				
Panel F: Successful – Failed Exogenous												
Diff DA	3.33%*	-	-2.75%	4.15%***	2.01%	0.39%	-1.13%	3.99%				
P-Value	(0.095)	-	-	(0.000)	(0.504)	(0.396)	-	(0.479)				
Diff DO	3.15%**	-	2.09%	2.57%*	0.27%	0.67%	-4.98%	1.18%				
P-Value	(0.015)	-	-	(0.068)	(0.826)	(0.820)	-	(0.449)				

Table 12: Three-Day CARs by Firm Valuation in Low-Valuation Months

This table reports the short-run three-day (-1,+1) cumulative abnormal returns (CARs) for the samples at announcement (DA) and outcome (DO), which is either the date of effective completion (DE) or the date of effective withdrawal (DW) for the successful and failed samples respectively by firm valuation in low-valuation months. We measure the CARs using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The Overall sample contains all deals in the full dataset. The Successful sample contains all deals which were subsequently completed so that the acquirer gained control of the target with a holding of +51%. The Failed All sample contains all deals which were subsequently withdrawn so that the acquirer did not gain control of the target. The Failed Exogenous sample contains all deals which failed for reasons exogenous to acquirer. For all samples, we examine those deals for which the acquirer was either over or undervalued during the acquisition process. The included deals in the overvalued (undervalued) sample are those in which the acquirer is classified as overvalued (undervalued). The acquirer's P/E on the month of announcement is compared with a historical firm P/E average of 24 months (-12,+12) around the deal announcement. If the announcement month P/E is higher (lower) than the historical average, the firm is classified as highly-valued (valued-low). We then take the top (bottom) 30% of these firms as Overvalued (Undervalued). For classification of the market's valuation, please see the Data and Methodology section or the source work by Bouwman, Fuller and Nain (2009). Cash deals refer to those which were financed 100% using cash. Stock deals refer to those which were financed 100% using equity. Mixed deals refer to those deals with known information confirming that the deal was financed using equity and cash. We control for the different sample sizes using STATA in Panel's E and F. The P-value is shown in parentheses. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	Overvalued				Undervalued				Differential: Overvalued - Undervalued			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Panel A: Overall												
Mean DA	0.23%	1.38%***	-1.87%	-0.20%	0.34%	-0.25%	3.09%	0.65%**	-0.11%	1.63%***	-4.96%	-0.85%*
P-Value	(0.436)	(0.000)	(0.261)	(0.628)	(0.144)	(0.471)	(0.293)	(0.028)	(0.778)	(0.001)	(0.141)	(0.096)
Mean DO	-0.03%	0.37%	-1.41%*	-0.13%	0.33%	0.19%	1.25%	0.38%	-0.36%	0.18%	-2.66%	-0.52%
P-Value	(0.908)	(0.278)	(0.099)	(0.728)	(0.112)	(0.566)	(0.441)	(0.143)	(0.290)	(0.714)	(0.148)	(0.267)
N	294	96	14	184	491	203	13	275				
Panel B: Successful												
Mean DA	0.27%	1.40%***	-2.04%	-0.15%	0.35%	-0.25%	4.17%	0.65%**	-0.08%	1.65%***	-6.20%	-0.80%
P-Value	(0.376)	(0.000)	(0.255)	(0.721)	(0.144)	(0.489)	(0.271)	(0.032)	(0.845)	(0.001)	(0.140)	(0.126)
Mean DE	0.00%	0.37%	-1.27%	-0.10%	0.34%	0.22%	0.66%	0.42%	-0.34%	0.15%	-1.93%	-0.52%
P-Value	(0.993)	(0.289)	(0.159)	(0.792)	(0.108)	(0.524)	(0.750)	(0.120)	(0.326)	(0.752)	(0.393)	(0.275)
N	287	94	13	180	476	199	10	267				
Panel C: Failed All												
Mean DA	-1.31%	0.20%	0.33%	-2.47%*	0.14%	-0.69%	-0.49%	0.80%	-1.45%	0.88%	0.82%	-3.27%
P-Value	(0.137)	(0.902)	-	(0.061)	(0.913)	(0.850)	(0.871)	(0.659)	(0.345)	(0.820)	-	(0.124)
Mean DW	-1.21%*	0.42%	-3.29%	-1.50%**	0.02%	-0.87%	3.22%*	-0.74%	-1.22%	1.29%	-6.51%	-0.76%
P-Value	(0.092)	(0.818)	-	(0.016)	(0.988)	(0.835)	(0.088)	(0.402)	(0.346)	(0.773)	-	(0.416)
N	7	2	1	4	15	4	3	8				
Panel D: Failed Exogenous												
Mean DA	-2.36%*	-	0.33%	-3.26%**	0.73%	2.10%	4.86%	-0.99%	-3.09%	-	-4.53%	-2.27%
P-Value	(0.088)	-	-	(0.018)	(0.688)	(0.609)	-	(0.719)	(0.153)	-	-	(0.434)
Mean DW	-2.04%**	-	-3.29%	-1.62%*	0.18%	-1.23%	5.27%	-0.38%	-2.22%*	-	-8.56%	-1.24%
P-Value	(0.027)	-	-	(0.054)	(0.848)	(0.422)	-	(0.505)	(0.066)	-	-	(0.108)
N	4	0	1	3	7	2	1	4				
Panel E: Successful – Failed All												
Diff DA	1.58%*	1.21%	-2.36%	2.32%*	0.20%	0.44%	4.66%	-0.15%				
P-Value	(0.091)	(0.529)	-	(0.071)	(0.879)	(0.903)	(0.323)	(0.934)				
Diff DO	1.20%	-0.05%	2.02%	1.39%**	0.32%	1.09%	-2.56%	1.16%				
P-Value	(0.106)	(0.977)	-	(0.011)	(0.781)	(0.796)	(0.281)	(0.222)				
Panel F: Successful – Failed Exogenous												
Diff DA	2.64%*	-	-2.36%	3.05%***	-0.38%	-2.35%	-0.69%	1.68%				
P-Value	(0.077)	-	-	(0.001)	(0.835)	(0.577)	-	(0.554)				
Diff DO	2.03%**	-	2.02%	1.32%*	0.15%	1.45%	-4.61%	0.80%				
P-Value	(0.016)	-	-	(0.053)	(0.878)	(0.390)	-	(0.230)				

Table 13: Cross-sectional Regressions for Five-Day CARs at Announcement I

This table reports the results for the cross-sectional analysis of the full samples. In models (1) to (6) we regress five-day CARs (-2,+2) at announcement on a set of explanatory variables. For a full definition of each variable please see the main text in the data and methodology section. We control for the possible existence of homoscedasticity using STATA and report robust T-Statistics. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	1	2	3	4	5	6
Intercept	0.021^{***}	0.009	0.021^{***}	0.016^{***}	0.009	0.005
	(0.000)	(0.166)	(0.000)	(0.001)	(0.162)	(0.458)
Successful		0.012^{**}			0.012^{**}	0.012^{**}
		(0.014)			(0.016)	(0.018)
Overvalued			-0.007^{***}		-0.007^{***}	
			(0.000)		(0.000)	
Undervalued				0.014^{**}		0.014^{**}
				(0.000)		(0.000)
High-Value Market	0.004^{*}	0.004^{*}	0.004^{**}	0.004^{*}	0.004^{**}	0.004^{*}
	(0.066)	(0.067)	(0.046)	(0.072)	(0.047)	(0.072)
Low-Value Market	0.001^{*}	0.001^{*}	0.002	0.003	0.002	0.003
	(0.631)	(0.652)	(0.572)	(0.358)	(0.592)	(0.374)
Private Deal	0.003	0.002	0.002	0.002	0.002	-0.001
	(0.168)	(0.268)	(0.181)	(0.192)	(0.284)	(0.298)
Cash	0.005^{***}	0.005^{***}	0.005^{***}	0.004^{**}	0.005^{***}	0.004^{**}
	(0.009)	(0.009)	(0.008)	(0.018)	(0.009)	(0.020)
Stock	-0.010^{*}	-0.009	-0.010^{*}	-0.009	-0.009^{*}	-0.008
	(0.074)	(0.104)	(0.064)	(0.105)	(0.091)	(0.144)
Diversifying	-0.001	-0.002	-0.001	-0.002	-0.001	-0.002
	(0.530)	(0.474)	(0.583)	(0.330)	(0.525)	(0.290)
Cross-Border	0.001	0.001	0.001	0.001	0.001	0.001
	(0.717)	(0.734)	(0.751)	(0.737)	(0.768)	(0.753)
Relative Size	0.000	0.000	0.000	0.000^{*}	0.000	0.000^{*}
	(0.115)	(0.115)	(0.115)	(0.078)	(0.115)	(0.078)
Log of Market Value	-0.007^{***}	-0.007^{***}	-0.007^{***}	-0.008^{***}	-0.006^{***}	-0.008^{***}
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
MTBV	0.000	0.000	0.000	0.000	0.000	0.000
	(0.665)	(0.609)	(0.727)	(0.746)	(0.669)	(0.689)
FTALLSH	0.044^{***}	0.044^{***}	0.049^{***}	0.053^{***}	0.049^{***}	0.053^{***}
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
RI-RM	0.006	0.006	0.008^{*}	0.009^{**}	0.008^{*}	0.009^{**}
	(0.158)	(0.153)	(0.086)	(0.041)	(0.083)	(0.039)
N	5350	5350	5350	5350	5350	5350
F-Statistics	5.03	5.25	5.33	8.49	5.46	8.40
R2	0.014	0.014	0.016	0.023	0.016	0.024

Table 14: Cross-sectional Regressions for Five-Day CARs at Outcome I

This table reports the results for the cross-sectional analysis of the full samples. In models (1) to (6) we regress five-day CARs (-2,+2) at outcome on a set of explanatory variables. For a full definition of each variable please see the main text in the data and methodology section. We control for the possible existence of homoscedasticity using STATA and report robust T-Statistics. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	1	2	3	4	5	6
Intercept	0.012^{***}	0.010	0.012^{***}	0.009^{***}	0.010	0.007
	(0.002)	(0.258)	(0.002)	(0.023)	(0.250)	(0.415)
Successful		0.003			0.002	0.002
		(0.732)			(0.752)	(0.768)
Overvalued			-0.005^{***}		-0.005^{***}	
			(0.001)		(0.001)	
Undervalued				0.009^{***}		0.009^{***}
				(0.000)		(0.000)
High-Value Market	0.000	0.000	0.000	0.000	0.000	0.000
	(0.924)	(0.923)	(0.960)	(0.888)	(0.961)	(0.887)
Low-Value Market	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(0.631)	(0.625)	(0.642)	(0.815)	(0.636)	(0.809)
Private Deal	0.000	0.000	0.000	0.000	0.000	0.000
	(0.908)	(0.959)	(0.939)	(0.959)	(0.986)	(0.997)
Cash	0.003	0.003	0.003	0.002	0.003	0.002
	(0.138)	(0.139)	(0.133)	(0.204)	(0.134)	(0.206)
Stock	-0.009^{*}	-0.009^{*}	-0.009^{**}	-0.008^{*}	-0.009^{*}	-0.008^{*}
	(0.057)	(0.062)	(0.050)	(0.077)	(0.055)	(0.083)
Diversifying	0.001	0.001	0.001	-0.008	0.001	0.000
	(0.623)	(0.636)	(0.567)	(0.808)	(0.578)	(0.821)
Cross-Border	-0.001	-0.001	-0.002	-0.001	-0.002	-0.001
	(0.431)	(0.428)	(0.404)	(0.410)	(0.402)	(0.408)
Relative Size	0.000^{**}	0.000^{**}	0.000^{**}	0.000^{*}	0.000^{**}	0.000^{*}
	(0.041)	(0.041)	(0.048)	(0.073)	(0.048)	(0.073)
Log of Market Value	-0.004^{**}	-0.004^{**}	-0.003^{**}	-0.005^{***}	-0.003^{**}	-0.005^{***}
	(0.011)	(0.012)	(0.034)	(0.003)	(0.036)	(0.003)
MTBV	0.001	0.001	0.001	0.001	0.001	0.001
	(0.338)	(0.345)	(0.292)	(0.276)	(0.297)	(0.281)
FTALLSH	0.030^{***}	0.030^{***}	0.033^{***}	0.035^{***}	0.033^{***}	0.035^{***}
	(0.004)	(0.004)	(0.001)	(0.001)	(0.001)	(0.001)
RI-RM	0.004	0.004	0.005	0.006	0.005	0.006
	(0.287)	(0.289)	(0.190)	(0.154)	(0.191)	(0.155)
N	5350	5350	5350	5350	5350	5350
F-Statistics	2.49	2.38	3.18	4.65	3.04	4.57
R2	0.006	0.007	0.009	0.013	0.009	0.013

Table 15: Cross-sectional Regressions for Three-Day CARs at Announcement I

This table reports the results for the cross-sectional analysis of the full samples. In models (1) to (6) we regress three-day CARs (-1,+1) at announcement on a set of explanatory variables. For a full definition of each variable please see the main text in the data and methodology section. We control for the possible existence of homoscedasticity using STATA and report robust T-Statistics. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	1	2	3	4	5	6
Intercept	0.021***	0.010**	0.021***	0.018***	0.010	0.007
	(0.000)	(0.090)	(0.000)	(0.000)	(0.089)	(0.238)
Successful		0.012**			0.012**	0.011**
		(0.011)			(0.012)	(0.013)
Overvalued			-0.006***		-0.006***	
			(0.000)		(0.000)	
Undervalued				0.009***		0.009***
				(0.000)		(0.000)
High-Value Market	0.004**	0.004**	0.004**	0.004**	0.004**	0.004**
	(0.015)	(0.016)	(0.010)	(0.017)	(0.010)	(0.017)
Low-Value Market	0.001	0.001	0.002	0.002	0.001	0.002
	(0.583)	(0.608)	(0.525)	(0.358)	(0.548)	(0.377)
Private Deal	0.002	0.002	0.002	0.002	0.002	0.002
	(0.117)	(0.209)	(0.127)	(0.132)	(0.223)	(0.231)
Cash	0.003**	0.003**	0.003**	0.003*	0.003**	0.003*
	(0.044)	(0.048)	(0.041)	(0.075)	(0.045)	(0.082)
Stock	-0.007	-0.006	-0.007	-0.006	-0.006	-0.005
	(0.142)	(0.196)	(0.125)	(0.183)	(0.174)	(0.246)
Diversifying	-0.001	-0.002	-0.001	-0.002	-0.001	-0.002
	(0.416)	(0.361)	(0.463)	(0.271)	(0.405)	(0.231)
Cross-Border	0.001	0.001	0.001	0.001	0.001	0.001
	(0.569)	(0.587)	(0.601)	(0.584)	(0.620)	(0.602)
Relative Size	0.000	0.000	0.000	0.000	0.000	0.000
	(0.525)	(0.523)	(0.504)	(0.386)	(0.503)	(0.385)
Log of Market Value	-0.007***	-0.007***	-0.007***	-0.008***	-0.006***	-0.008***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
MTBV	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(0.315)	(0.272)	(0.359)	(0.361)	(0.313)	(0.315)
FTALLSH	0.033***	0.033***	0.037***	0.039***	0.037***	0.039***
	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
RI-RM	0.004	0.004	0.005	0.006	0.005	0.006
	(0.282)	(0.273)	(0.161)	(0.109)	(0.155)	(0.104)
N	5350	5350	5350	5350	5350	5350
F-Statistics	4.98	5.12	5.34	7.51	5.37	7.34
R2	0.014	0.015	0.017	0.021	0.018	0.022

Table 16: Cross-sectional Regressions for Three-Day CARs at Outcome I

This table reports the results for the cross-sectional analysis of the full samples. In models (1) to (6) we regress three-day CARs (-1,+1) at outcome on a set of explanatory variables. For a full definition of each variable please see the main text in the data and methodology section. We control for the possible existence of homoscedasticity using STATA and report robust T-Statistics. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	1	2	3	4	5	6
Intercept	0.014***	0.007	0.014***	0.012***	0.007	0.005
	(0.000)	(0.343)	(0.000)	(0.000)	(0.332)	(0.495)
Successful		0.008			0.008	0.007
		(0.230)			(0.243)	(0.244)
Overvalued			-0.005***		-0.005***	
			(0.000)		(0.000)	
Undervalued				0.007***		0.007***
				(0.000)		(0.000)
High-Value Market	0.001	0.001	0.001	0.001	0.001	0.001
	(0.465)	(0.469)	(0.371)	(0.488)	(0.375)	(0.492)
Low-Value Market	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(0.583)	(0.560)	(0.593)	(0.739)	(0.571)	(0.713)
Private Deal	0.000	0.000	0.000	0.000	0.000	0.000
	(0.812)	(0.990)	(0.845)	(0.854)	(0.980)	(0.973)
Cash	0.002	0.002	0.002	0.001	0.002	0.001
	(0.264)	(0.275)	(0.256)	(0.355)	(0.268)	(0.369)
Stock	-0.009**	-0.009**	-0.010**	-0.009**	-0.009**	-0.008*
	(0.029)	(0.041)	(0.025)	(0.037)	(0.035)	(0.051)
Diversifying	0.001	0.001	0.002	0.001	0.001	0.001
	(0.366)	(0.405)	(0.321)	(0.490)	(0.355)	(0.534)
Cross-Border	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(0.560)	(0.544)	(0.524)	(0.539)	(0.510)	(0.524)
Relative Size	0.000	0.000	0.000	0.000	0.000	0.000
	(0.428)	(0.431)	(0.475)	(0.513)	(0.478)	(0.515)
Log of Market Value	-0.005***	-0.005***	-0.005***	-0.006***	-0.004***	-0.005***
	(0.000)	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)
MTBV	0.000	0.000	0.000	0.000	0.000	0.000
	(0.758)	(0.805)	(0.680)	(0.677)	(0.724)	(0.720)
FTALLSH	0.021**	0.021**	0.024***	0.024***	0.024***	0.024***
	(0.012)	(0.012)	(0.004)	(0.004)	(0.004)	(0.004)
RI-RM	0.004	0.004	0.005	0.005	0.005	0.005
	(0.232)	(0.236)	(0.147)	(0.137)	(0.150)	(0.140)
N	5350	5350	5350	5350	5350	5350
F-Statistics	2.68	2.48	3.62	4.26	3.37	4.05
R2	0.010	0.010	0.012	0.014	0.013	0.015

Table 17: Cross-sectional Regressions for Five-Day CARs at Announcement II

This table reports the results for the cross-sectional analysis of the full samples excluding those deals that failed for reasons endogenous to the acquirer. In models (1) to (6) we regress five-day CARs (-2,+2) at announcement on a set of explanatory variables. For a full definition of each variable please see the main text in the data and methodology section. We control for the possible existence of homoscedasticity using STATA and report robust T-Statistics. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	1	2	3	4	5	6
Intercept	0.021***	0.010	0.021***	0.016***	0.011	0.006
	(0.000)	(0.160)	(0.000)	(0.001)	(0.149)	(0.444)
Successful		0.011*			0.010*	0.011*
		(0.066)			(0.074)	(0.063)
Overvalued			-0.007***		-0.007***	
			(0.000)		(0.000)	
Undervalued				0.014***		0.014***
				(0.000)		(0.000)
High-Value Market	0.004*	0.004*	0.004**	0.004*	0.004**	0.004*
	(0.059)	(0.062)	(0.041)	(0.065)	(0.043)	(0.067)
Low-Value Market	0.002	0.001	0.002	0.003	0.002	0.003
	(0.597)	(0.607)	(0.538)	(0.328)	(0.546)	(0.335)
Private Deal	0.002	0.002	0.002	0.002	0.002	0.002
	(0.216)	(0.276)	(0.229)	(0.240)	(0.289)	(0.305)
Cash	0.005***	0.005***	0.005***	0.004**	0.005***	0.004**
	(0.007)	(0.008)	(0.007)	(0.016)	(0.007)	(0.017)
Stock	-0.010*	-0.010*	-0.010*	-0.009*	-0.010*	-0.009
	(0.066)	(0.080)	(0.057)	(0.098)	(0.070)	(0.117)
Diversifying	-0.002	-0.002	-0.001	-0.002	-0.001	-0.002
	(0.469)	(0.442)	(0.525)	(0.289)	(0.498)	(0.270)
Cross-Border	0.001	0.001	0.001	0.001	0.001	0.001
	(0.626)	(0.649)	(0.656)	(0.650)	(0.679)	(0.673)
Relative Size	0.000	0.000	0.000	0.000*	0.000	0.000*
	(0.118)	(0.117)	(0.117)	(0.080)	(0.117)	(0.080)
Log of Market Value	-0.007***	-0.007***	-0.006***	-0.008***	-0.006***	-0.008***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)
MTBV	0.000	0.000	0.000	0.000	0.000	0.000
	(0.606)	(0.587)	(0.666)	(0.682)	(0.648)	(0.663)
FTALLSH	0.044***	0.044***	0.049***	0.053***	0.049***	0.053***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
RI-RM	0.006	0.006	0.008	0.009*	0.008	0.009*
	(0.194)	(0.196)	(0.106)	(0.055)	(0.107)	(0.056)
N	5300	5300	5300	5300	5300	5300
F-Statistics	4.9	4.97	0.53	8.42	5.32	8.25
R2	0.013	0.014	0.016	0.023	0.016	0.024

Table 18: Cross-sectional Regressions for Five-Day CARs at Outcome II

This table reports the results for the cross-sectional analysis of the full samples excluding those deals that failed for reasons endogenous to the acquirer. In models (1) to (6) we regress five-day CARs (-2,+2) at outcome on a set of explanatory variables. For a full definition of each variable please see the main text in the data and methodology section. We control for the possible existence of homoscedasticity using STATA and report robust T-Statistics. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	1	2	3	4	5	6
Intercept	0.013***	0.011	0.013***	0.010**	0.011	0.008
	(0.002)	(0.158)	(0.002)	(0.022)	(0.148)	(0.313)
Successful		0.001			0.001	0.001
		(0.835)			(0.870)	(0.827)
Overvalued			-0.006***		-0.006***	
			(0.000)		(0.000)	
Undervalued				0.009***		0.009***
				(0.000)		(0.000)
High-Value Market	0.000	0.000	0.000	0.000	0.000	0.000
	(0.941)	(0.939)	(0.936)	(0.905)	(0.938)	(0.903)
Low-Value Market	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(0.627)	(0.625)	(0.641)	(0.822)	(0.640)	(0.820)
Private Deal	0.000	0.000	0.000	0.000	0.000	0.000
	(0.923)	(0.940)	(0.950)	(0.963)	(0.963)	(0.981)
Cash	0.002	0.002	0.002	0.002	0.002	0.002
	(0.164)	(0.166)	(0.157)	(0.236)	(0.158)	(0.238)
Stock	-0.011**	-0.011**	-0.011**	-0.010**	-0.011**	-0.010**
	(0.021)	(0.021)	(0.019)	(0.031)	(0.018)	(0.031)
Diversifying	0.001	0.001	0.001	0.000	0.001	0.000
	(0.725)	(0.730)	(0.654)	(0.912)	(0.657)	(0.917)
Cross-Border	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(0.480)	(0.477)	(0.449)	(0.453)	(0.447)	(0.450)
Relative Size	0.000**	0.000**	0.000**	0.000*	0.000**	0.000*
	(0.039)	(0.039)	(0.046)	(0.070)	(0.046)	(0.070)
Log of Market Value	-0.004**	-0.004**	-0.003**	-0.004***	-0.003**	-0.004***
	(0.014)	(0.015)	(0.046)	(0.004)	(0.049)	(0.005)
MTBV	0.001	0.001	0.001	0.001	0.001	0.001
	(0.406)	(0.408)	(0.350)	(0.339)	(0.352)	(0.341)
FTALLSH	0.027***	0.027***	0.031***	0.032***	0.031***	0.032***
	(0.006)	(0.006)	(0.002)	(0.001)	(0.002)	(0.001)
RI-RM	0.005	0.005	0.006	0.006	0.006	0.006
	(0.221)	(0.221)	(0.136)	(0.113)	(0.136)	(0.113)
N	5300	5300	5300	5300	5300	5300
F-Statistics	2.69	2.48	3.44	5.21	3.2	4.83
R2	0.007	0.007	0.010	0.013	0.010	0.013

Table 19: Cross-sectional Regressions for Three-Day CARs at Announcement II

This table reports the results for the cross-sectional analysis of the full samples excluding those deals that failed for reasons endogenous to the acquirer. In models (1) to (6) we regress three-day CARs (-1,+1) at announcement on a set of explanatory variables. For a full definition of each variable please see the main text in the data and methodology section. We control for the possible existence of homoscedasticity using STATA and report robust T-Statistics. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	1	2	3	4	5	6
Intercept	0.021***	0.013**	0.021***	0.018***	0.013**	0.010
	(0.000)	(0.038)	(0.000)	(0.000)	(0.035)	(0.122)
Successful		0.008			0.008	0.008*
		(0.103)			(0.115)	(0.100)
Overvalued			-0.006***		-0.006***	
			(0.000)		(0.000)	
Undervalued				0.009***		0.009***
				(0.000)		(0.000)
High-Value Market	0.004**	0.004**	0.004***	0.004**	0.004***	0.004**
	(0.012)	(0.013)	(0.008)	(0.013)	(0.008)	(0.014)
Low-Value Market	0.001	0.001	0.002	0.002	0.001	0.002
	(0.584)	(0.592)	(0.522)	(0.353)	(0.530)	(0.360)
Private Deal	0.002	0.002	0.002	0.002	0.002	0.002
	(0.177)	(0.226)	(0.188)	(0.194)	(0.238)	(0.247)
Cash	0.003**	0.003**	0.003**	0.003*	0.003**	0.003*
	(0.035)	(0.038)	(0.032)	(0.060)	(0.035)	(0.065)
Stock	-0.007	-0.007	-0.008	-0.007	-0.007	-0.006
	(0.122)	(0.143)	(0.107)	(0.163)	(0.126)	(0.188)
Diversifying	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002
	(0.318)	(0.299)	(0.363)	(0.202)	(0.343)	(0.188)
Cross-Border	0.001	0.001	0.001	0.001	0.001	0.001
	(0.438)	(0.457)	(0.465)	(0.455)	(0.483)	(0.474)
Relative Size	0.000	0.000	0.000	0.000	0.000	0.000
	(0.541)	(0.539)	(0.518)	(0.400)	(0.517)	(0.398)
Log of Market Value	-0.007***	-0.007***	-0.007***	-0.008***	-0.006***	-0.008***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
MTBV	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(0.286)	(0.275)	(0.329)	(0.329)	(0.317)	(0.316)
FTALLSH	0.032***	0.032***	0.036***	0.038***	0.037***	0.038***
	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)
RI-RM	0.004	0.004	0.005	0.006	0.005	0.006
	(0.310)	(0.312)	(0.173)	(0.126)	(0.175)	(0.127)
N	5300	5300	5300	5300	5300	5300
F-Statistics	4.8	4.76	5.3	7.39	5.19	7.15
R2	0.014	0.014	0.017	0.021	0.017	0.021

Table 20: Cross-sectional Regressions for Three-Day CARs at Outcome II

This table reports the results for the cross-sectional analysis of the full samples excluding those deals that failed for reasons endogenous to the acquirer. In models (1) to (6) we regress three-day CARs (-1,+1) at outcome on a set of explanatory variables. For a full definition of each variable please see the main text in the data and methodology section. We control for the possible existence of homoscedasticity using STATA and report robust T-Statistics. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	1	2	3	4	5	6
Intercept	0.015***	0.011*	0.015***	0.013***	0.011*	0.009
	(0.000)	(0.062)	(0.000)	(0.000)	(0.057)	(0.140)
Successful		0.004			0.004	0.004
		(0.367)			(0.397)	(0.362)
Overvalued			-0.005***		-0.005***	
			(0.000)		(0.000)	
Undervalued				0.006***		0.006***
				(0.000)		(0.000)
High-Value Market	0.001	0.001	0.001	0.001	0.001	0.001
	(0.525)	(0.530)	(0.420)	(0.549)	(0.425)	(0.554)
Low-Value Market	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(0.575)	(0.569)	(0.589)	(0.737)	(0.584)	(0.731)
Private Deal	0.000	0.000	0.000	0.000	0.000	0.000
	(0.949)	(0.991)	(0.978)	(0.983)	(0.966)	(0.957)
Cash	0.001	0.001	0.001	0.001	0.001	0.001
	(0.302)	(0.311)	(0.291)	(0.396)	(0.299)	(0.407)
Stock	-0.010**	-0.010**	-0.010**	-0.010**	-0.010**	-0.009**
	(0.021)	(0.024)	(0.019)	(0.028)	(0.021)	(0.032)
Diversifying	0.001	0.001	0.001	0.001	0.001	0.001
	(0.510)	(0.526)	(0.445)	(0.650)	(0.459)	(0.668)
Cross-Border	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(0.686)	(0.672)	(0.644)	(0.658)	(0.632)	(0.644)
Relative Size	0.000	0.000	0.000	0.000	0.000	0.000
	(0.423)	(0.425)	(0.473)	(0.505)	(0.475)	(0.507)
Log of Market Value	-0.005***	-0.005***	-0.004***	-0.005***	-0.004***	-0.005***
	(0.000)	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)
MTBV	0.000	0.000	0.000	0.000	0.000	0.000
	(0.886)	(0.897)	(0.799)	(0.806)	(0.809)	(0.817)
FTALLSH	0.019**	0.019**	0.022***	0.022***	0.022***	0.023***
	(0.017)	(0.017)	(0.006)	(0.005)	(0.005)	(0.005)
RI-RM	0.005	0.005	0.006	0.006	0.006	0.006
	(0.185)	(0.185)	(0.110)	(0.107)	(0.110)	(0.107)
N	5300	5300	5300	5300	5300	5300
F-Statistics	2.87	2.76	3.81	4.83	3.61	4.58
R2	0.009	0.010	0.012	0.014	0.012	0.014

Table 21: Thirty-Six Month BHARs

This table reports the long-run thirty-six month BHARs for the samples from the announcement date of the deal (DA) and the subsequent date of outcome (DO), which is either the date of effective completion (DE) or effective withdrawal (DW) for the successful and failed samples respectively. We measure the BHARs using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The Overall sample contains all deals in the full dataset. The Successful sample contains all deals which were subsequently completed so that the acquirer gained control of the target with a holding of +51%. The Failed All sample contains all deals which were subsequently withdrawn so that the acquirer did not gain control of the target. The Failed Exogenous sample contains all deals which failed for reasons exogenous to acquirer. Cash deals refer to those which were financed 100% using cash. Stock deals refer to those which were financed 100% using equity. Mixed deals refer to those deals with known information confirming that the deal was financed using equity and cash. We control for the different sample sizes using STATA in Panel's E and F. The P-value is shown in parentheses. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	All	Cash	Stock	Mixed
Panel A: Overall				
Mean DA	-23.09%***	-13.27%***	-43.21%***	-27.07%***
P-Value	(0.000)	(0.000)	(0.000)	(0.000)
Mean DO	-24.05%***	-14.10%***	-44.29%***	-28.08%***
P-Value	(0.000)	(0.000)	(0.000)	(0.000)
N	5462	1866	250	3346
Panel B: Successful				
Mean DA	-23.60%***	-13.29%***	-47.09%***	-27.83%***
P-Value	(0.000)	(0.000)	(0.000)	(0.000)
Mean DE	-24.42%***	-13.98%***	-47.02%***	-28.80%***
P-Value	(0.000)	(0.000)	(0.000)	(0.000)
N	5239	1825	226	3188
Panel C: Failed All				
Mean DA	-11.27%*	-12.35%	-6.65%	-11.69%
P-Value	(0.058)	(0.192)	(0.740)	(0.118)
Mean DW	-15.14%**	-19.53%**	-18.57%	-13.48%*
P-Value	(0.011)	(0.048)	(0.262)	(0.077)
N	223	41	24	158
Panel D: Failed Exogenous				
Mean DA	3.78%	-9.89%	-20.73%	12.47%
P-Value	(0.695)	(0.450)	(0.464)	(0.328)
Mean DW	-3.58%	-27.48%	-46.22%	11.56%
P-Value	(0.709)	(0.050)	(0.014)	(0.374)
N	105	20	14	71
Panel E: Successful – Failed All				
Diff DA	-12.32%**	-0.94%	-40.44%*	-16.14%**
P-Value	(0.042)	(0.921)	(0.059)	(0.035)
Diff DO	-9.29%	5.55%	-28.45%	-15.32%**
P-Value	(0.123)	(0.572)	(0.105)	(0.048)
Panel F: Successful – Failed Exogenous				
Diff DA	-27.67%***	-3.57%	-27.21%	-40.63%***
P-Value	(0.005)	(0.786)	(0.347)	(0.002)
Diff DO	-21.15%**	13.32%	-1.64%	-40.70%***
P-Value	(0.030)	(0.328)	(0.925)	(0.003)

Table 22: Twenty-Four Month BHARs

This table reports the long-run twenty-four month BHARs for the samples from the announcement date of the deal (DA) and the subsequent date of outcome (DO), which is either the date of effective completion (DE) or effective withdrawal (DW) for the successful and failed samples respectively. We measure the BHARs using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The Overall sample contains all deals in the full dataset. The Successful sample contains all deals which were subsequently completed so that the acquirer gained control of the target with a holding of +51%. The Failed All sample contains all deals which were subsequently withdrawn so that the acquirer did not gain control of the target. The Failed Exogenous sample contains all deals which failed for reasons exogenous to acquirer. Cash deals refer to those which were financed 100% using cash. Stock deals refer to those which were financed 100% using equity. Mixed deals refer to those deals with known information confirming that the deal was financed using equity and cash. We control for the different sample sizes using STATA in Panel's E and F. The P-value is shown in parentheses. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	All	Cash	Stock	Mixed
		Panel A: Overall		
Mean DA	-14.61%***	-7.49%***	-35.60%***	-17.01%***
P-Value	(0.000)	(0.000)	(0.000)	(0.000)
Mean DO	-15.53%***	-8.49%***	-38.18%***	-17.77%***
P-Value	(0.000)	(0.000)	(0.000)	(0.000)
N	5462	1866	250	3346
		Panel B: Successful		
Mean DA	-14.73%***	-7.54%***	-38.02%***	-17.20%***
P-Value	(0.000)	(0.000)	(0.000)	(0.000)
Mean DE	-15.73%***	-8.58%***	-40.55%***	-18.07%***
P-Value	(0.000)	(0.000)	(0.000)	(0.000)
N	5239	1825	226	3188
		Panel C: Failed All		
Mean DA	-11.64%***	-5.22%	-12.83%	-13.12%**
P-Value	(0.006)	(0.512)	(0.445)	(0.010)
Mean DW	-10.84%**	-4.49%	-15.90%	-11.72%**
P-Value	(0.012)	(0.637)	(0.263)	(0.025)
N	223	41	24	158
		Panel D: Failed Exogenous		
Mean DA	-0.05%	-1.82%	-22.40%	4.86%
P-Value	(0.994)	(0.849)	(0.389)	(0.518)
Mean DW	0.59%	-1.61%	-29.28%	7.10%
P-Value	(0.927)	(0.912)	(0.134)	(0.357)
N	105	20	14	71
		Panel E: Successful – Failed All		
Diff DA	-3.10%	-2.32%	-25.19%	-4.08%
P-Value	(0.473)	(0.774)	(0.151)	(0.429)
Diff DO	-4.89%	-4.10%	-24.65%*	-6.34%
P-Value	(0.267)	(0.670)	(0.099)	(0.233)
		Panel F: Successful – Failed Exogenous		
Diff DA	-14.87%**	-5.81%	-16.30%	-22.27%**
P-Value	(0.022)	(0.549)	(0.533)	(0.004)
Diff DO	-16.52%**	-7.08%	-12.00%	-25.38%**
P-Value	(0.012)	(0.630)	(0.532)	(0.002)

Table 23: Thirty-Six Month BHARs by Firm Valuation

This table reports the long-run thirty-six (0,+36) month buy and hold abnormal returns (BHARs) for the samples at announcement (DA) and outcome (DO), which is either the date of effective completion (DE) or the date of effective withdrawal (DW) for the successful and failed samples respectively by firm valuation. We measure the BHARs using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The Overall sample contains all deals in the full dataset. The Successful sample contains all deals which were subsequently completed so that the acquirer gained control of the target with a holding of +51%. The Failed All sample contains all deals which were subsequently withdrawn so that the acquirer did not gain control of the target. The Failed Exogenous sample contains all deals which failed for reasons exogenous to acquirer. For all samples, we examine those deals for where the acquirer was either over or undervalued during the acquisition process. The included deals in the overvalued (undervalued) sample are those in which the acquirer is classified as overvalued (undervalued) as follows: the acquirer's P/E on the month of announcement is compared with a historical firm P/E average of 24 months (-12,+12) around the deal announcement. If the announcement month P/E is higher (lower) than the historical average, the firm is classified as highly-valued (valued-low). We then take the top (bottom) 30% of these firms as Overvalued (Undervalued). Cash deals refer to those which were financed 100% using cash. Stock deals refer to those which were financed 100% using equity. Mixed deals refer to those deals with known information confirming that the deal was financed using equity and cash. We control for the different sample sizes using STATA in Panel's E and F. The P-value is shown in parentheses. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	Overvalued				Undervalued				Differential: Overvalued - Undervalued			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Panel A: Overall												
Mean DA	-27.97%***	-20.99%***	-41.86%***	-30.71%***	-12.87%***	-2.72%	-22.56%**	-18.47%***	-15.10%***	-18.27%***	-19.30%	-12.24%***
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.356)	(0.012)	(0.000)	(0.000)	(0.000)	(0.128)	(0.000)
Mean DO	-27.97%***	-20.89%***	-46.60%	-30.45%***	-14.70%***	-4.43%	-23.77%***	-20.37%***	-13.27%***	-16.46%***	-22.83%**	-10.08%***
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.127)	(0.006)	(0.000)	(0.000)	(0.000)	(0.055)	(0.000)
N	1921	684	78	1176	2375	897	73	1434				
Panel B: Successful												
Mean DA	-28.40%***	-21.39%***	-46.82%***	-31.02%***	-13.10%***	-2.29%	-26.07%***	-19.15%***	-15.30%***	-19.10%***	-20.75%	-11.87%***
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.444)	(0.009)	(0.000)	(0.000)	(0.000)	(0.113)	(0.000)
Mean DE	-28.36%***	-21.33%***	-47.67%***	-30.93%***	-14.80%***	-3.70%	-26.54%***	-21.05%***	-13.56%***	-17.64%***	-21.13%	-9.88%***
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.212)	(0.006)	(0.000)	(0.000)	(0.000)	(0.101)	(0.001)
N	1838	668	69	1118	2276	876	64	1365				
Panel C: Failed All												
Mean DA	-18.42%**	-4.04%	-3.78%	-24.66%***	-7.53%	-20.37%	2.40%	-4.91%	-10.89%	16.33%	-6.18%	-19.75%
P-Value	(0.015)	(0.805)	(0.930)	(0.001)	(0.383)	(0.106)	(0.897)	(0.672)	(0.338)	(0.423)	(0.894)	(0.152)
Mean DW	-19.44%***	-2.54%	-38.43%	-21.16%***	-12.59%	-35.01%***	-4.09%	-6.88%	-6.85%	32.46%	-34.33%	-14.28%
P-Value	(0.006)	(0.888)	(0.193)	(0.007)	(0.158)	(0.004)	(0.792)	(0.570)	(0.543)	(0.131)	(0.289)	(0.318)
N	83	16	9	58	99	21	9	69				
Panel D: Failed Exogenous												
Mean DA	-8.74%	-4.16%	-13.98%	4.03%	7.45%	-14.58%	11.23%	14.89%	-16.19%	10.42%	-25.21%	-10.86%
P-Value	(0.442)	(0.839)	(0.797)	(0.723)	(0.531)	(0.424)	(0.661)	(0.522)	(0.324)	(0.698)	(0.669)	(0.673)
Mean DW	-12.50%	-2.47%	-58.74%*	3.28%	-3.74%	-47.95%*	-1.61%	14.00%	-8.76%	45.48%*	-57.13%*	-10.72%
P-Value	(0.217)	(0.911)	(0.075)	(0.801)	(0.766)	(0.007)	(0.910)	(0.568)	(0.585)	(0.098)	(0.095)	(0.698)
N	44	9	7	24	46	11	4	20				
Panel E: Successful – Failed All												
Diff DA	-9.98%	-17.35%	-43.05%	-6.37%	-5.58%	18.08%	-28.47%	-14.24%				
P-Value	(0.189)	(0.303)	(0.341)	(0.404)	(0.526)	(0.160)	(0.184)	(0.230)				
Diff DO	-8.92%	-18.79%	-9.24%	-9.78%	-2.21%	31.31%**	-22.44%	-14.18%				
P-Value	(0.212)	(0.312)	(0.753)	(0.216)	(0.807)	(0.010)	(0.223)	(0.251)				
Panel F: Successful – Failed Exogenous												
Diff DA	-19.66%*	-17.52%	-32.84%	-41.37%***	-20.55%*	12.25%	-38.58%	-36.64%				
P-Value	(0.090)	(0.405)	(0.554)	(0.001)	(0.092)	(0.505)	(0.197)	(0.127)				
Diff DO	-15.86%	-19.15%	11.07%	-41.17%***	-11.06%	44.20%**	-26.23%	-37.98%				
P-Value	(0.123)	(0.398)	(0.711)	(0.004)	(0.386)	(0.012)	(0.152)	(0.134)				

Table 24: Twenty-Four Month BHARs by Firm Valuation

This table reports the long-run twenty-four (0,+24) month buy and hold abnormal returns (BHARs) for the samples at announcement (DA) and outcome (DO), which is either the date of effective completion (DE) or the date of effective withdrawal (DW) for the successful and failed samples respectively by firm valuation. We measure the BHARs using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The Overall sample contains all deals in the full dataset. The Successful sample contains all deals which were subsequently completed so that the acquirer gained control of the target with a holding of +51%. The Failed All sample contains all deals which were subsequently withdrawn so that the acquirer did not gain control of the target. The Failed Exogenous sample contains all deals which failed for reasons exogenous to acquirer. For all samples, we examine those deals for where the acquirer was either over or undervalued during the acquisition process. The included deals in the overvalued (undervalued) sample are those in which the acquirer is classified as overvalued (undervalued) as follows: the acquirer's P/E on the month of announcement is compared with a historical firm P/E average of 24 months (-12,+12) around the deal announcement. If the announcement month P/E is higher (lower) than the historical average, the firm is classified as highly-valued (valued-low). We then take the top (bottom) 30% of these firms as Overvalued (Undervalued). Cash deals refer to those which were financed 100% using cash. Stock deals refer to those which were financed 100% using equity. Mixed deals refer to those deals with known information confirming that the deal was financed using equity and cash. We control for the different sample sizes using STATA in Panel's E and F. The P-value is shown in parentheses. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	Overvalued				Undervalued				Differential: Overvalued - Undervalued			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Panel A: Overall												
Mean DA	-21.49%***	-15.88%***	-29.25%***	-23.93%***	-3.61%***	2.08%	-15.95%**	-6.46%***	-17.89%***	-17.96%***	-13.30%	-17.47%***
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.009)	(0.331)	(0.018)	(0.000)	(0.000)	(0.000)	(0.172)	(0.000)
Mean DO	-21.45%***	-16.10%***	-31.79%***	-23.58%***	-5.39%***	0.67%	-20.53%***	-8.31%***	-16.06%***	-16.77%***	-11.27%	-15.27%***
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.750)	(0.002)	(0.000)	(0.000)	(0.000)	(0.216)	(0.000)
N	1921	684	78	1176	2375	897	73	1434				
Panel B: Successful												
Mean DA	-21.81%***	-16.18%***	-31.76%***	-24.23%***	-3.57%**	2.28%	-17.64%**	-6.60%***	-18.23%***	-18.47%***	-14.11%	-17.63%***
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.012)	(0.294)	(0.018)	(0.000)	(0.000)	(0.000)	(0.149)	(0.000)
Mean DE	-21.88%***	-16.52%***	-33.54%***	-24.03%***	-5.40%***	0.91%	-21.97%***	-8.56%***	-16.48%***	-17.42%***	-11.57%	-15.47%***
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.671)	(0.003)	(0.000)	(0.000)	(0.000)	(0.225)	(0.000)
N	1838	668	69	1118	2276	876	64	1365				
Panel C: Failed All												
Mean DA	-14.48%**	-3.48%	-10.05%	-18.20%***	-4.31%	-6.41%	-3.92%	-3.72%	-10.17%	2.94%	-6.13%	-14.48%
P-Value	(0.023)	(0.806)	(0.797)	(0.003)	(0.513)	(0.560)	(0.783)	(0.670)	(0.264)	(0.869)	(0.882)	(0.171)
Mean DW	-12.12%**	1.48%	-18.40%	-14.90%***	-5.24%	-9.14%	-10.24%	-3.40%	-6.88%	10.62%	-8.16%	-11.50%
P-Value	(0.048)	(0.923)	(0.540)	(0.022)	(0.452)	(0.524)	(0.431)	(0.703)	(0.456)	(0.610)	(0.799)	(0.294)
N	83	16	9	58	99	21	9	69				
Panel D: Failed Exogenous												
Mean DA	-10.11%	-3.72%	-17.33%	-3.12%	11.67%	-0.26%	3.97%	13.57%	-21.78%*	-3.46%	-21.30%	-16.69%
P-Value	(0.279)	(0.796)	(0.727)	(0.724)	(0.206)	(0.985)	(0.887)	(0.450)	(0.096)	(0.860)	(0.702)	(0.403)
Mean DW	-9.48%	-1.84%	-30.14%	-3.14%	11.52%	-1.42%	-3.45%	18.50%	-21.00%	-0.42%	-26.69%	-21.64%
P-Value	(0.230)	(0.904)	(0.412)	(0.710)	(0.276)	(0.954)	(0.813)	(0.354)	(0.111)	(0.988)	(0.489)	(0.316)
N	44	9	7	24	46	11	4	20				
Panel E: Successful – Failed All												
Diff DA	-7.33%	-12.71%	-21.70%	-6.02%	0.74%	8.70%	-13.72%	-2.88%				
P-Value	(0.254)	(0.380)	(0.588)	(0.326)	(0.913)	(0.440)	(0.397)	(0.747)				
Diff DO	-9.75%	-17.99%	-15.15%	-9.13%	-0.16%	10.05%	-11.73%	-5.15%				
P-Value	(0.117)	(0.255)	(0.620)	(0.165)	(0.982)	(0.489)	(0.425)	(0.572)				
Panel F: Successful – Failed Exogenous												
Diff DA	-11.70%	-12.68%	-14.43%	-24.20%**	-15.24%	2.58%	-22.48%	-19.55%				
P-Value	(0.216)	(0.392)	(0.772)	(0.012)	(0.105)	(0.853)	(0.453)	(0.285)				
Diff DO	-12.40%	-14.90%	-3.40%	-24.47%	-16.92%	2.34%	-19.60%	-26.72%				
P-Value	(0.123)	(0.345)	(0.925)	(0.009)	(0.115)	(0.924)	(0.255)	(0.188)				

Table 25: Thirty-Six Month BHARs by Market Valuation

This table reports the long-run thirty-six (0,+36) month buy and hold abnormal returns (BHARs) for the samples at announcement (DA) and outcome (DO), which is either the date of effective completion (DE) or the date of effective withdrawal (DW) for the successful and failed samples respectively by market valuation. We measure the BHARs using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The Overall sample contains all deals in the full dataset. The Successful sample contains all deals which were subsequently completed so that the acquirer gained control of the target with a holding of +51%. The Failed All sample contains all deals which were subsequently withdrawn so that the acquirer did not gain control of the target. The Failed Exogenous sample contains all deals which failed for reasons exogenous to acquirer. For classification of the market's valuation, please see the Data and Methodology section or Bouwman, Fuller and Nain (2009). Cash deals refer to those which were financed 100% using cash. Stock deals refer to those which were financed 100% using equity. Mixed deals refer to those deals with known information confirming that the deal was financed using equity and cash. We control for the different sample sizes using STATA in Panel's E and F. The P-value is shown in parentheses. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	High Valuation				Low Valuation				Differential: High Valuation – Low Valuation			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Panel A: Overall												
Mean DA	-19.41%***	-8.62%***	-38.13%***	-23.00%***	-16.71%***	-3.19%	-29.55%**	-23.26%***	-2.71%	-5.43%	-8.58%	0.25%
P-Value	(0.000)	(0.007)	(0.000)	(0.000)	(0.000)	(0.490)	(0.029)	(0.000)	(0.418)	(0.332)	(0.583)	(0.953)
Mean DO	-20.45%***	-9.96%***	-39.26%***	-23.84%***	-18.51%***	-4.41%	-38.14%***	-24.91%***	-1.94%	-5.55%	-1.11%	1.07%
P-Value	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.340)	(0.003)	(0.000)	(0.555)	(0.320)	(0.938)	(0.797)
N	1783	583	81	1152	1056	360	45	652				
Panel B: Successful												
Mean DA	-19.81%***	-8.80%***	-36.91%***	-23.89%***	-18.03%***	-3.02%	-47.65%***	-24.54%***	-1.78%	-5.78%	10.74%	0.65%
P-Value	(0.000)	(0.006)	(0.000)	(0.000)	(0.000)	(0.516)	(0.000)	(0.000)	(0.592)	(0.306)	(0.449)	(0.877)
Mean DE	-20.61%***	-9.76%***	-38.17%***	-24.54%***	-19.42%***	-4.07%	-48.13%***	-26.18%***	-1.20%	-5.70%	9.95%	1.63%
P-Value	(0.000)	(0.002)	(0.000)	(0.000)	(0.000)	(0.385)	(0.000)	(0.000)	(0.715)	(0.312)	(0.490)	(0.689)
N	1695	570	72	1087	1024	354	40	631				
Panel C: Failed All												
Mean DA	-11.17%	-0.62%	-47.86%**	-8.19%	25.60%	-13.14%	115.26%*	15.33%	-36.77%	12.52%	-163.12%**	-23.52%
P-Value	(0.184)	(0.968)	(0.030)	(0.432)	(0.357)	(0.766)	(0.066)	(0.689)	(0.207)	(0.787)	(0.020)	(0.553)
Mean DW	-16.80%*	-18.60%	-47.93%**	-12.13%	10.54%	-24.76%	41.72%	13.20%	-27.34%	6.16%	-89.65%	-25.33%
P-Value	(0.064)	(0.363)	(0.023)	(0.278)	(0.685)	(0.462)	(0.425)	(0.724)	(0.322)	(0.871)	(0.132)	(0.517)
N	87	13	9	65	32	6	5	21				
Panel D: Failed Exogenous												
Mean DA	-6.42%	32.39%*	-48.41%*	-2.98%	83.78%	30.16%	158.24%	79.99%	-90.20%*	2.23%	-206.65%	-82.97%
P-Value	(0.525)	(0.070)	(0.057)	(0.810)	(0.112)	(0.802)	(0.328)	(0.245)	(0.094)	(0.985)	(0.246)	(0.235)
Mean DW	-16.74%	-14.78%	-48.22%*	-9.47%	59.52%	-24.12%	-34.17%	91.77%	-76.26%	9.34%	-14.05%	-101.24%
P-Value	(0.135)	(0.712)	(0.050)	(0.484)	(0.230)	(0.700)	(0.608)	(0.168)	(0.137)	(0.889)	(0.823)	(0.138)
N	41	5	7	29	15	2	2	11				
Panel E: Successful – Failed All												
Diff DA	-8.65%	-8.19%	10.95%	-15.69%	-43.63%	10.12%	-162.91%**	-39.87%				
P-Value	(0.314)	(0.603)	(0.600)	(0.144)	(0.123)	(0.819)	(0.022)	(0.305)				
Diff DO	-3.81%	8.83%	9.76%	-12.41%	-29.96%	20.69%	-89.85%	-39.38%				
P-Value	(0.678)	(0.665)	(0.620)	(0.276)	(0.256)	(0.538)	(0.129)	(0.301)				
Panel F: Successful – Failed Exogenous												
Diff DA	-13.42%	-41.40%**	11.50%	-21.36%	-101.81%**	-33.18%	-205.89%	-104.57%				
P-Value	(0.195)	(0.033)	(0.623)	(0.098)	(0.059)	(0.784)	(0.257)	(0.138)				
Diff DO	-3.89%	4.79%	10.05%	-15.53%	-78.94%	20.05%	-13.96%	-117.99%*				
P-Value	(0.728)	(0.904)	(0.653)	(0.261)	(0.119)	(0.745)	(0.822)	(0.086)				

Table 26: Twenty-Four Month BHARs by Market Valuation

This table reports the long-run twenty-four (0,+24) month buy and hold abnormal returns (BHARs) for the samples at announcement (DA) and outcome (DO), which is either the date of effective completion (DE) or the date of effective withdrawal (DW) for the successful and failed samples respectively by market valuation. We measure the BHARs using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The Overall sample contains all deals in the full dataset. The Successful sample contains all deals which were subsequently completed so that the acquirer gained control of the target with a holding of +51%. The Failed All sample contains all deals which were subsequently withdrawn so that the acquirer did not gain control of the target. The Failed Exogenous sample contains all deals which failed for reasons exogenous to acquirer. For classification of the market's valuation, please see the Data and Methodology section or Bouwman, Fuller and Nain (2009). Cash deals refer to those which were financed 100% using cash. Stock deals refer to those which were financed 100% using equity. Mixed deals refer to those deals with known information confirming that the deal was financed using equity and cash. We control for the different sample sizes using STATA in Panel's E and F. The P-value is shown in parentheses. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	High Valuation				Low Valuation				Differential: High Valuation – Low Valuation			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Panel A: Overall												
Mean DA	-14.15%***	-7.95%***	-35.44%***	-15.38%***	-6.73%***	3.61%	-15.61%	-11.81%***	-7.42%***	-11.56%***	-19.84%	-3.57%
P-Value	(0.000)	(0.004)	(0.000)	(0.000)	(0.001)	(0.262)	(0.116)	(0.000)	(0.004)	(0.007)	(0.104)	(0.277)
Mean DO	-14.76%***	-8.06%***	-37.17%***	-16.15%***	-7.94%***	2.58%	-22.05%***	-12.77%***	-6.81%***	-10.63%***	-15.12%	-3.38%
P-Value	(0.000)	(0.003)	(0.000)	(0.000)	(0.000)	(0.395)	(0.013)	(0.000)	(0.007)	(0.009)	(0.168)	(0.297)
N	1783	583	81	1152	1056	360	45	652				
Panel B: Successful												
Mean DA	-14.22%***	-8.08%***	-34.30%***	-15.71%***	-7.47%***	3.58%***	-28.06%***	-12.35%***	-6.75%**	-11.66%***	-6.24%	-3.36%
P-Value	(0.000)	(0.004)	(0.000)	(0.000)	(0.000)	(0.270)	(0.001)	(0.000)	(0.010)	(0.007)	(0.576)	(0.313)
Mean DE	-15.05%***	-8.60%***	-36.32%***	-16.58%***	-8.43%***	2.80%***	-30.80%***	-13.30%***	-6.61%***	-11.40%***	-5.52%	-3.28%
P-Value	(0.000)	(0.002)	(0.000)	(0.000)	(0.000)	(0.360)	(0.001)	(0.000)	(0.009)	(0.005)	(0.618)	(0.318)
N	1695	570	72	1087	1024	354	40	631				
Panel C: Failed All												
Mean DA	-12.38%*	-2.19%	-44.60%**	-9.96%	17.05%	5.66%	84.01%	4.36%	-29.43%	-7.85%	-128.61%**	-14.32%
P-Value	(0.063)	(0.896)	(0.021)	(0.206)	(0.315)	(0.858)	(0.115)	(0.839)	(0.108)	(0.824)	(0.034)	(0.531)
Mean DW	-8.82%	15.74%	-43.91%**	-8.87%	7.72%	-10.65%	48.02%	3.38%	-16.54%	26.40%	-91.94%**	-12.25%
P-Value	(0.226)	(0.486)	(0.021)	(0.284)	(0.613)	(0.686)	(0.110)	(0.874)	(0.329)	(0.440)	(0.012)	(0.593)
N	87	13	9	65	32	6	5	21				
Panel D: Failed Exogenous												
Mean DA	-9.09%	25.77%	-46.21%**	-6.14%	53.20%*	19.36%	154.68%	40.91%	-62.29%*	6.41%	-200.89%	-47.05%
P-Value	(0.259)	(0.135)	(0.049)	(0.511)	(0.094)	(0.824)	(0.301)	(0.276)	(0.059)	(0.941)	(0.224)	(0.225)
Mean DW	-6.22%	56.19%	-42.37%**	-8.26%	46.55%*	2.19%	77.36%	49.01%	-52.77%*	54.00%	-119.73%	-57.27%
P-Value	(0.515)	(0.244)	(0.048)	(0.388)	(0.093)	(0.969)	(0.328)	(0.178)	(0.071)	(0.441)	(0.186)	(0.130)
N	41	5	7	29	15	2	2	11				
Panel E: Successful – Failed All												
Diff DA	-1.84%	-5.89%	10.31%	-5.75%	-24.52%	-2.08%	-112.07%*	-16.72%				
P-Value	(0.787)	(0.728)	(0.564)	(0.480)	(0.154)	(0.948)	(0.054)	(0.441)				
Diff DO	-6.23%	-24.34%	7.59%	-7.72%	-16.16%	13.46%	-78.83%**	-16.68%				
P-Value	(0.404)	(0.291)	(0.663)	(0.367)	(0.297)	(0.613)	(0.024)	(0.441)				
Panel F: Successful – Failed Exogenous												
Diff DA	-5.15%	-34.04%*	11.91%	-9.86%	-60.67%*	-15.78%	-182.74%	-53.28%				
P-Value	(0.530)	(0.068)	(0.574)	(0.307)	(0.060)	(0.856)	(0.257)	(0.165)				
Diff DO	-8.84%	-64.99%	6.05%	-8.63%	-54.98%*	0.61%	-108.16%	-62.34%*				
P-Value	(0.363)	(0.190)	(0.754)	(0.379)	(0.052)	(0.991)	(0.235)	(0.096)				

Table 27: Thirty-Six Month BHARs by Firm Valuation in High-Valuation Months

This table reports the long-run thirty-six (0,+36) month buy and hold abnormal returns (BHARs) for the samples at announcement (DA) and outcome (DO), which is either the date of effective completion (DE) or the date of effective withdrawal (DW) for the successful and failed samples respectively by firm valuation in high valuation months. We measure the BHARs using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The Overall sample contains all deals in the full dataset. The Successful sample contains all deals which were subsequently completed so that the acquirer gained control of the target with a holding of +51%. The Failed All sample contains all deals which were subsequently withdrawn so that the acquirer did not gain control of the target. The Failed Exogenous sample contains all deals which failed for reasons exogenous to acquirer. For all samples, we examine those deals for where the acquirer was either over or undervalued during the acquisition process. The included deals in the overvalued (undervalued) sample are those in which the acquirer is classified as overvalued (undervalued) as follows: the acquirer's P/E on the month of announcement is compared with a historical firm P/E average of 24 months (-12,+12) around the deal announcement. If the announcement month P/E is higher (lower) than the historical average, the firm is classified as highly-valued (valued-low). We then take the top (bottom) 30% of these firms as Overvalued (Undervalued). For classification of the market's valuation, please see the Data and Methodology section or Bouwman, Fuller and Nain (2009). Cash deals refer to those which were financed 100% using cash. Stock deals refer to those which were financed 100% using equity. Mixed deals refer to those deals with known information confirming that the deal was financed using equity and cash. We control for the different sample sizes using STATA in Panel's E and F. The P-value is shown in parentheses. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	Overvalued				Undervalued				Differential: Overvalued - Undervalued			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Panel A: Overall												
Mean DA	-23.27%***	-20.12%***	-31.45%**	-24.63%***	-7.53%**	6.51%	-8.03%	-14.87%***	-15.74%***	-26.63%***	-23.42%	-9.76%**
P-Value	(0.000)	(0.000)	(0.045)	(0.000)	(0.019)	(0.253)	(0.572)	(0.000)	(0.000)	(0.000)	(0.254)	(0.040)
Mean DO	-23.27%***	-19.94%***	-36.48%**	-24.52%***	-9.55%***	3.28%	-10.30%	-16.23%***	-13.72%***	-23.22%***	-26.18%	-8.28%*
P-Value	(0.000)	(0.000)	(0.020)	(0.000)	(0.003)	(0.558)	(0.421)	(0.000)	(0.000)	(0.000)	(0.177)	(0.084)
N	748	254	19	475	779	258	29	492				
Panel B: Successful												
Mean DA	-24.40%***	-21.67%***	-31.93%*	-25.60%***	-7.90%**	6.90%	-3.76%	-16.07%***	-16.50%***	-28.57%***	-28.17%	-9.53%*
P-Value	(0.000)	(0.000)	(0.053)	(0.000)	(0.017)	(0.243)	(0.814)	(0.000)	(0.000)	(0.000)	(0.208)	(0.051)
Mean DE	-24.24%***	-21.44%***	-36.51%**	-25.31%***	-9.69%***	4.37%	-6.77%	-17.39%***	-14.56%***	-25.81%***	-29.75%	-7.91%
P-Value	(0.000)	(0.000)	(0.029)	(0.000)	(0.003)	(0.449)	(0.637)	(0.000)	(0.000)	(0.000)	(0.160)	(0.106)
N	696	240	17	439	735	248	25	462				
Panel C: Failed All												
Mean DA	-10.92%	15.06%	-27.38%	-14.89%	-1.69%	-5.23%	-34.69%	4.20%	-9.23%	20.29%	7.31%	-19.09%
P-Value	(0.171)	(0.497)	(0.755)	(0.082)	(0.920)	(0.832)	(0.244)	(0.853)	(0.620)	(0.532)	(0.935)	(0.430)
Mean DW	-13.55%	13.43%	-36.21%	-17.31%**	-8.84%	-39.62%	-32.39%	1.88%	-4.71%	53.06%	-3.82%	-19.19%
P-Value	(0.104)	(0.628)	(0.657)	(0.047)	(0.639)	(0.242)	(0.259)	(0.940)	(0.818)	(0.214)	(0.963)	(0.466)
N	39	6	2	31	36	6	4	26				
Panel D: Failed Exogenous												
Mean DA	-4.23%	42.17%	-27.38%	-4.62%	7.29%	17.71%**	-23.45%	-8.67%	-11.52%	24.46%	-3.93%	4.05%
P-Value	(0.722)	(0.189)	(0.755)	(0.701)	(0.686)	(0.018)	(0.398)	(0.712)	(0.591)	(0.373)	(0.963)	(0.876)
Mean DW	-8.99%	42.62%	-36.21%	-10.77%	-11.43%	-100.87%	-17.86%	-5.25%	2.44%	143.49%**	-18.35%	-5.52%
P-Value	(0.439)	(0.161)	(0.657)	(0.369)	(0.627)	(0.116)	(0.573)	(0.864)	(0.925)	(0.016)	(0.815)	(0.866)
N	20	3	2	14	15	2	2	8				
Panel E: Successful – Failed All												
Diff DA	-13.48%	-36.73%	-4.56%	-10.71%	-6.21%	12.13%	30.92%	-20.27%				
P-Value	(0.104)	(0.139)	(0.958)	(0.227)	(0.719)	(0.637)	(0.323)	(0.382)				
Diff DO	-10.70%	-34.87%	-0.30%	-8.00%	-0.85%	44.00%	25.62%	-19.28%				
P-Value	(0.210)	(0.242)	(0.997)	(0.368)	(0.965)	(0.208)	(0.391)	(0.447)				
Panel F: Successful – Failed Exogenous												
Diff DA	-20.17%	-63.84%*	-4.56%	-26.34%**	-15.19%	-10.81%*	19.68%	-8.84%				
P-Value	(0.106)	(0.093)	(0.957)	(0.050)	(0.412)	(0.069)	(0.457)	(0.714)				
Diff DO	-15.25%	-64.06%*	-0.30%	-20.28%	1.75%	105.25%	11.09%	-13.70%				
P-Value	(0.202)	(0.077)	(0.997)	(0.117)	(0.941)	(0.116)	(0.748)	(0.663)				

Table 28: Twenty-Four BHARs by Firm Valuation in High-Valuation Months

This table reports the long-run twenty-four (0,+24) month buy and hold abnormal returns (BHARs) for the samples at announcement (DA) and outcome (DO), which is either the date of effective completion (DE) or the date of effective withdrawal (DW) for the successful and failed samples respectively by firm valuation in high valuation months. We measure the BHARs using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The Overall sample contains all deals in the full dataset. The Successful sample contains all deals which were subsequently completed so that the acquirer gained control of the target with a holding of +51%. The Failed All sample contains all deals which were subsequently withdrawn so that the acquirer did not gain control of the target. The Failed Exogenous sample contains all deals which failed for reasons exogenous to acquirer. For all samples, we examine those deals for where the acquirer was either over or undervalued during the acquisition process. The included deals in the overvalued (undervalued) sample are those in which the acquirer is classified as overvalued (undervalued) as follows: the acquirer's P/E on the month of announcement is compared with a historical firm P/E average of 24 months (-12,+12) around the deal announcement. If the announcement month P/E is higher (lower) than the historical average, the firm is classified as highly-valued (valued-low). We then take the top (bottom) 30% of these firms as Overvalued (Undervalued). For classification of the market's valuation, please see the Data and Methodology section or Bouwman, Fuller and Nain (2009). Cash deals refer to those which were financed 100% using cash. Stock deals refer to those which were financed 100% using equity. Mixed deals refer to those deals with known information confirming that the deal was financed using equity and cash. We control for the different sample sizes using STATA in Panel's E and F. The P-value is shown in parentheses. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	Overvalued				Undervalued				Differential: Overvalued - Undervalued			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Panel A: Overall												
Mean DA	-23.80%***	-20.36%***	-31.07%**	-25.34%***	-1.21%	4.40%	-16.17%	-3.27%	-22.59%***	-24.76%***	-14.90%	-22.07%***
P-Value	(0.000)	(0.000)	(0.027)	(0.000)	(0.657)	(0.315)	(0.117)	(0.365)	(0.000)	(0.000)	(0.368)	(0.000)
Mean DO	-23.23%***	-19.42%***	-36.84%***	-24.72%***	-1.21%	4.01%	-19.61%**	-5.84%*	-22.02%***	-23.43%***	-17.22%	-18.88%***
P-Value	(0.000)	(0.000)	(0.004)	(0.000)	(0.657)	(0.343)	(0.047)	(0.095)	(0.000)	(0.000)	(0.242)	(0.000)
N	748	254	19	475	779	258	29	492				
Panel B: Successful												
Mean DA	-25.03%***	-21.89%***	-30.92%**	-26.53%***	-1.00%	4.86%	-13.62%	-3.46%	-24.03%***	-26.74%***	-17.31%	-23.06%***
P-Value	(0.000)	(0.000)	(0.036)	(0.000)	(0.724)	(0.283)	(0.240)	(0.355)	(0.000)	(0.000)	(0.332)	(0.000)
Mean DE	-24.53%***	-20.92%***	-36.56%***	-26.03%***	-3.20%	3.65%	-17.48%	-6.11%*	-21.32%***	-24.57%***	-19.08%	-19.92%***
P-Value	(0.000)	(0.000)	(0.006)	(0.000)	(0.239)	(0.396)	(0.107)	(0.090)	(0.000)	(0.000)	(0.227)	(0.000)
N	696	240	17	439	735	248	25	462				
Panel C: Failed All												
Mean DA	-9.63%	13.50%	-32.34%	-12.65%	-5.76%	-11.66%	-32.14%	-0.34%	-3.87%	25.16%	-0.20%	-12.30%
P-Value	(0.229)	(0.645)	(0.693)	(0.117)	(0.638)	(0.631)	(0.158)	(0.983)	(0.790)	(0.499)	(0.998)	(0.491)
Mean DW	-7.74%	14.73%	-39.16%	-10.06%	-1.44%	21.68%	-32.96%	-1.93%	-6.30%	-6.96%	-6.21%	-8.14%
P-Value	(0.341)	(0.590)	(0.590)	(0.239)	(0.918)	(0.632)	(0.233)	(0.908)	(0.697)	(0.892)	(0.931)	(0.663)
N	39	6	2	31	36	6	4	26				
Panel D: Failed Exogenous												
Mean DA	-7.00%	31.61%	-32.34%	-8.75%	6.08%	17.01%	-25.29%	8.52%	-13.08%	14.60%	-7.05%	-17.27%
P-Value	(0.528)	(0.303)	(0.693)	(0.483)	(0.590)	(0.431)	(0.439)	(0.633)	(0.404)	(0.624)	(0.929)	(0.423)
Mean DW	-10.52%	29.43%	-39.16%	-11.93%	15.92%	96.32%	-16.58%	3.18%	-26.44%	-66.89%	-22.58%	-15.10%
P-Value	(0.279)	(0.228)	(0.590)	(0.256)	(0.405)	(0.558)	(0.403)	(0.884)	(0.218)	(0.666)	(0.741)	(0.530)
N	20	3	2	14	15	2	2	8				
Panel E: Successful – Failed All												
Diff DA	-15.40%*	-35.39%	1.41%	-13.88%*	4.76%	16.52%	18.52%	-3.12%				
P-Value	(0.064)	(0.257)	(0.986)	(0.098)	(0.705)	(0.509)	(0.402)	(0.849)				
Diff DO	-16.78%**	-35.64%	2.60%	-15.97%*	-1.77%	-18.03%	15.48%	-4.19%				
P-Value	(0.048)	(0.225)	(0.969)	(0.075)	(0.902)	(0.691)	(0.562)	(0.807)				
Panel F: Successful – Failed Exogenous												
Diff DA	-18.03%	-53.50%	1.41%	-20.72%	-7.08%	-12.16%	11.67%	-8.22%				
P-Value	(0.118)	(0.143)	(0.986)	(0.121)	(0.543)	(0.554)	(0.709)	(0.658)				
Diff DO	-14.01%	-50.35%*	2.60%	-17.12%	-19.12%	-92.67%	-0.90%	-6.50%				
P-Value	(0.160)	(0.094)	(0.969)	(0.127)	(0.325)	(0.570)	(0.960)	(0.772)				

Table 29: Thirty-Six Month BHARs by Firm Valuation in Low-Valuation Months

This table reports the long-run thirty-six (0,+36) month buy and hold abnormal returns (BHARs) for the samples at announcement (DA) and outcome (DO), which is either the date of effective completion (DE) or the date of effective withdrawal (DW) for the successful and failed samples respectively by firm valuation in low valuation months. We measure the BHARs using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The Overall sample contains all deals in the full dataset. The Successful sample contains all deals which were subsequently completed so that the acquirer gained control of the target with a holding of +51%. The Failed All sample contains all deals which were subsequently withdrawn so that the acquirer did not gain control of the target. The Failed Exogenous sample contains all deals which failed for reasons exogenous to acquirer. For all samples, we examine those deals for where the acquirer was either over or undervalued during the acquisition process. The included deals in the overvalued (undervalued) sample are those in which the acquirer is classified as overvalued (undervalued) as follows: the acquirer's P/E on the month of announcement is compared with a historical firm P/E average of 24 months (-12,+12) around the deal announcement. If the announcement month P/E is higher (lower) than the historical average, the firm is classified as highly-valued (valued-low). We then take the top (bottom) 30% of these firms as Overvalued (Undervalued). For classification of the market's valuation, please see the Data and Methodology section or Bouwman, Fuller and Nain (2009). Cash deals refer to those which were financed 100% using cash. Stock deals refer to those which were financed 100% using equity. Mixed deals refer to those deals with known information confirming that the deal was financed using equity and cash. We control for the different sample sizes using STATA in Panel's E and F. The P-value is shown in parentheses. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	Overvalued				Undervalued				Differential: Overvalued - Undervalued			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Panel A: Overall												
Mean DA	-17.85%***	-2.58%	-12.57%	-26.21%***	-12.98%***	-3.27%	-28.79%	-19.40%***	-4.87%	0.69%	16.22%	-6.82%
P-Value	(0.000)	(0.744)	(0.693)	(0.000)	(0.001)	(0.591)	(0.134)	(0.000)	(0.401)	(0.945)	(0.657)	(0.338)
Mean DO	-19.30%***	-3.90%	-35.15%	-26.12%***	-14.53%***	-4.24%	-39.23%**	-20.95%***	-4.77%	0.34%	4.08%	-5.17%
P-Value	(0.000)	(0.618)	(0.176)	(0.000)	(0.000)	(0.482)	(0.049)	(0.000)	(0.405)	(0.972)	(0.894)	(0.469)
N	294	96	14	184	491	203	13	275				
Panel B: Successful												
Mean DA	-18.61%***	-2.39%	-32.60%	-26.07%***	-13.54%***	-3.06%	-51.28%**	-19.95%***	-5.07%	0.66%	18.68%	-6.13%
P-Value	(0.000)	(0.762)	(0.231)	(0.000)	(0.000)	(0.620)	(0.012)	(0.000)	(0.378)	(0.947)	(0.548)	(0.387)
Mean DE	-19.36%***	-3.74%	-31.51%	-26.64%***	-14.97%***	-3.70%	-59.91%***	-21.69%***	-4.39%	-0.04%	28.40%	-4.95%
P-Value	(0.000)	(0.632)	(0.253)	(0.000)	(0.000)	(0.547)	(0.009)	(0.000)	(0.448)	(0.997)	(0.382)	(0.489)
N	287	94	13	180	476	199	10	267				
Panel C: Failed All												
Mean DA	13.55%	-11.53%	247.76%	-32.45%	4.95%	-13.94%	46.17%	-1.07%	8.61%	2.40%	201.59%	-31.39%
P-Value	(0.804)	(0.935)	-	(0.528)	(0.875)	(0.789)	(0.233)	(0.985)	(0.890)	(0.987)	-	(0.667)
Mean DW	-16.53%	-11.51%	-82.53%	-2.55%	-0.36%	-31.38%	29.69%	3.89%	-16.18%	19.87%	-112.23%	-6.44%
P-Value	(0.590)	(0.933)	-	(0.920)	(0.990)	(0.211)	(0.290)	(0.944)	(0.697)	(0.887)	-	(0.914)
N	7	2	1	4	15	4	3	8				
Panel D: Failed Exogenous												
Mean DA	57.34%	-	247.76%	-6.14%	51.22%	30.16%	68.72%	57.37%	6.12%	-	179.04%	-63.51%
P-Value	(0.493)	-	-	(0.918)	(0.423)	(0.802)	-	(0.620)	(0.950)	-	-	(0.613)
Mean DW	-5.11%	-	-82.53%	20.69%**	36.29%	-24.12%	14.20%	72.02%	-41.40%	-	-96.74%	-51.32%
P-Value	(0.857)	-	-	(0.045)	(0.545)	(0.700)	-	(0.519)	(0.525)	-	-	(0.640)
N	4	0	1	3	7	2	1	4				
Panel E: Successful – Failed All												
Diff DA	-32.17%	9.14%	-280.36%	6.38%	-18.49%	10.88%	-97.45%*	-18.88%				
P-Value	(0.562)	(0.949)	-	(0.898)	(0.563)	(0.835)	(0.055)	(0.737)				
Diff DO	-2.83%	7.77%	51.03%	-24.10%	-14.62%	27.69%	-89.60%**	-25.59%				
P-Value	(0.927)	(0.955)	-	(0.390)	(0.622)	(0.274)	(0.022)	(0.647)				
Panel E: Successful – Failed Exogenous												
Diff DA	-75.95%	-	-280.36%	-23.51%	-64.76%	-33.22%	-120.00%	-80.79%				
P-Value	(0.379)	-	-	(0.701)	(0.319)	(0.784)	-	(0.495)				
Diff DO	-14.25%	-	51.03%	-50.81%***	-51.26%	20.43%	-74.11%	-96.34%				
P-Value	(0.627)	-	-	(0.000)	(0.401)	(0.743)	-	(0.402)				

Table 30: Twenty-Four Month BHARs by Firm Valuation in Low-Valuation Months

This table reports the long-run twenty-four (0,+24) month buy and hold abnormal returns (BHARs) for the samples at announcement (DA) and outcome (DO), which is either the date of effective completion (DE) or the date of effective withdrawal (DW) for the successful and failed samples respectively by firm valuation in low valuation months. We measure the BHARs using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The Overall sample contains all deals in the full dataset. The Successful sample contains all deals which were subsequently completed so that the acquirer gained control of the target with a holding of +51%. The Failed All sample contains all deals which were subsequently withdrawn so that the acquirer did not gain control of the target. The Failed Exogenous sample contains all deals which failed for reasons exogenous to acquirer. For all samples, we examine those deals for where the acquirer was either over or undervalued during the acquisition process. The included deals in the overvalued (undervalued) sample are those in which the acquirer is classified as overvalued (undervalued) as follows: the acquirer's P/E on the month of announcement is compared with a historical firm P/E average of 24 months (-12,+12) around the deal announcement. If the announcement month P/E is higher (lower) than the historical average, the firm is classified as highly-valued (valued-low). We then take the top (bottom) 30% of these firms as Overvalued (Undervalued). For classification of the market's valuation, please see the Data and Methodology section or Bouwman, Fuller and Nain (2009). Cash deals refer to those which were financed 100% using cash. Stock deals refer to those which were financed 100% using equity. Mixed deals refer to those deals with known information confirming that the deal was financed using equity and cash. We control for the different sample sizes using STATA in Panel's E and F. The P-value is shown in parentheses. Statistical significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively.

	Overvalued				Undervalued				Differential: Overvalued - Undervalued			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
					Panel A: Full Sample							
Mean DA	-8.87%***	1.07%	1.19%	-14.83%***	0.32%	6.05%	-11.01%	-3.37%	-9.19%**	-4.97%	12.19%	-11.46%**
P-Value	(0.005)	(0.838)	(0.960)	(0.000)	(0.901)	(0.105)	(0.398)	(0.348)	(0.023)	(0.438)	(0.647)	(0.028)
Mean DO	-9.51%***	0.24%	-3.63%	-15.04%***	-1.26%	4.90%	-25.05%*	-4.68%	-8.25%**	-4.66%	21.42%	-10.36%**
P-Value	(0.002)	(0.964)	(0.840)	(0.000)	(0.618)	(0.176)	(0.069)	(0.187)	(0.039)	(0.470)	(0.332)	(0.047)
N	294	96	14	184	491	203	13	275				
					Panel B: Successful Sample							
Mean DA	-9.55%***	1.35%	-16.70%	-14.72%***	-0.17%	5.88%	-23.03%	-3.82%	-9.38%**	-4.53%	6.33%	-10.90%**
P-Value	(0.002)	(0.796)	(0.306)	(0.000)	(0.946)	(0.118)	(0.108)	(0.272)	(0.018)	(0.479)	(0.758)	(0.035)
Mean DE	-10.07%***	0.66%	-13.23%	-15.45%***	-1.48%	5.13%	-36.32%**	-5.09%	-8.60%**	-4.46%	23.09%	-10.36%**
P-Value	(0.001)	(0.901)	(0.423)	(0.000)	(0.554)	(0.164)	(0.031)	(0.138)	(0.031)	(0.488)	(0.293)	(0.046)
N	287	94	13	180	476	199	10	267				
					Panel C: Failed Sample							
Mean DA	18.73%	-11.84%	233.77%	-19.75%	15.85%	14.41%	29.08%	11.61%	2.88%	-26.25%	204.69%	-31.36%
P-Value	(0.673)	(0.908)	-	(0.486)	(0.526)	(0.689)	(0.343)	(0.799)	(0.954)	(0.815)	-	(0.550)
Mean DW	13.74%	-19.61%	121.10%	3.57%	5.77%	-6.17%	12.52%	9.22%	7.96%	-13.44%	108.59%	-5.65%
P-Value	(0.642)	(0.853)	-	(0.872)	(0.809)	(0.765)	(0.376)	(0.841)	(0.831)	(0.901)	-	(0.910)
N	7	2	1	4	15	4	3	8				
					Panel D: Failed Exogenous Sample							
Mean DA	45.76%	-	233.77%	-16.92%	47.62%	19.36%	75.59%	54.76%	-1.86%	-	158.18%	-71.67%
P-Value	(0.546)	-	-	(0.677)	(0.371)	(0.824)	-	(0.572)	(0.983)	-	-	(0.486)
Mean DW	43.57%	-	121.10%	17.72%	36.82%	2.19%	33.62%	54.93%	6.75%	-	87.49%	-37.21%
P-Value	(0.239)	-	-	(0.482)	(0.474)	(0.969)	-	(0.570)	(0.908)	-	-	(0.701)
N	4	0	1	3	7	2	1	4				
					Panel E: Successful – Failed							
Diff DA	-28.28%	13.19%	-250.48%	5.03%	-16.02%	-8.53%	-52.11%	-15.43%				
P-Value	(0.529)	(0.898)	-	(0.855)	(0.524)	(0.812)	(0.148)	(0.737)				
Diff DO	-23.81%	20.28%	-134.33%	-19.02%	-7.25%	11.30%	-48.83%**	-14.32%				
P-Value	(0.432)	(0.849)	-	(0.426)	(0.763)	(0.599)	(0.027)	(0.757)				
					Panel F: Successful – Failed Exogenous							
Diff DA	-55.30%	-	-250.48%	-2.51%	-47.79%	-13.48%	-98.62%	-61.24%				
P-Value	(0.472)	-	-	(0.950)	(0.370)	(0.876)	-	(0.530)				
Diff DO	-53.64%	-	-134.33%	-37.93%	-38.29%	2.94%	-69.93%	-61.92%				
P-Value	(0.170)	-	-	(0.214)	(0.457)	(0.958)	-	(0.526)				

CHAPTER FOUR:
PRE-MERGER ISSUANCE & POST-MERGER SHAREHOLDER VALUE

In this chapter we investigate the pre-merger financing activity and the post-merger performance of acquiring firms to examine the financing decision of UK mergers and the subsequent valuation effect. A sample of UK acquirers is split into two – those that have issued debt and/or equity in the three-years and those that have not. The subsequent announcement performance and long-run value of these firms is assessed stratifying by firm size and firm valuation. The short-term results indicate that at the announcement, those firms that issue significantly underperform those that do not when the firm pays for its merger using stock. When we stratify according to the type of security issued, big acquirers are found to significantly gain when issuing. The gains from debt issuance for an acquirer continue in the long-term where statistical outperformance of debt issuers is found in their post-merger performance. The chapter highlights that debt can serve to improve the investment decisions of the firm, which can benefit shareholders via lower merger losses with statistical gains at times found over the long-run period. It is therefore recommended that firms seek to utilise the benefits of debt to the advantage of their shareholders. .

4. Chapter Four: Pre-Merger Issuance and Post-Merger Shareholder Value

"If you have something at risk, you think differently."
Henry Kravis (Kohlberg Kravis Roberts & Co)

Mergers and Acquisitions (M&As) have long been the vehicle for vast sums of investment. For the UK market, M&A activity continues to rise year-on-year (Thomson One Banker SDC). The previous chapter empirically indicated that despite the rise in merger volume, long-term stock price performance remains bleak for UK acquirers. Corporate value was destroyed via M&A activity over a long-term period. Addressing this contentious debate over whether M&A is indeed a value-destructive corporate exploit, Epstein (2005: 39) writes crucially that '*a successful merger requires careful attention to two aspects of the deal structure: price premium and financing type*'. The 2010 takeover of the UK firm Cadbury by the US Kraft is a typical example of CEO narcissism as Rosenfeld ignored advice from investment guru Warren Buffett, borrowing £7 billion to fund the acquisition. This heavy-financing burden has weighed hard on Kraft that has continued to underperform rival Hersheys in the post-merger period up to 2012 (Investors Chronicle 2012: Article 1). Does issuing debt or equity prior to a merger deal really exert a significant impact on the post-merger value creation for shareholders? This chapter aims to address this issue by comparatively assessing the stock price performance of acquirers that issue equity or debt before their merger against those which do not.

The UK M&A market has largely been ignored within empirical research (Petmezas, 2009) and yet it holds a unique anomaly in its preference for cash financing. With most research conducted pertaining to the US market, Faccio and Masulis (2005) investigated the European M&A market and documented very different characteristics in comparison to the US results. In particular, their work showed that the UK predominantly prefers cash as the medium of payment when financing M&A activity. The question remains open as to where this money comes from and why it is that UK firms prefer to use cash as their primary financing method. It is in these respects that we aim to make a contribution and stimulate further research. The existing literature in the corporate finance field has failed to examine how acquirers perform if they have issued debt or equity prior to the deal. This chapter investigates this pressing issue and offers recommendations for extensions in future work.

Capital structure and firm value have been well researched in the corporate finance literature (Donaldson, 1961; Myers, 1984; Myers and Majluf, 1984; Baker and Wurgler, 2002) with the development of three central models – Trade-Off, Pecking-Order and Market-Timing. The Trade-Off model presents managers as walking a tightrope between the benefits of increasing debt through its tax deductibility and the simultaneous increase in financial distress costs and likelihood of bankruptcy (Modigliani and Miller, 1958/1963; Myers, 1984). Modigliani and Miller (1958/1963) in their seminal papers argued that because of this trade-off, there lies an optimal firm value that is achieved through incremental adjustments in capital structure so that the firm can move towards an optimal level of debt.

Despite the simplicity of the trade-off model, much literature noted that it fails to account for market-wide anomalies such as the finding that the most profitable firms in an industry tending to hold the lowest debt ratios (Titman and Wessels, 1988; Shyam-Sunder and Myers, 1999) or indeed the positive market reaction documented following an increase in a firm's leverage position (Ghosh and Jain, 2000). Aware of these anomalies, Myers (1984) re-modelled the issuance decision under an asymmetric information framework, laying the foundations for the signalling hypothesis. The Pecking-Order model of Myers (1984) writes that managers have a preference for internal relative to external financing because of the information that the decision conveys to the market. In this way, managers prefer internal resources first then once they have been exhausted, they will then initially look toward external sources, tapping into the debt market before finally, as a last resource, raising funds from the equity market. The idea is that if the manager directly issues equity, then the decision conveys an indication that the manager must believe the stock to be overvalued as otherwise this would be a less than rational decision. This argument has been applied to M&As to explain the anomaly of underperformance following stock acquisitions (Travlos, 1987).

Despite the logic of both the Trade-Off and the Pecking-Order models, both hold an assumption that markets are rational and efficient. The Trade-Off model assumes that managers are rational enough to recognise the tightrope they walk between debt issuance and financial distress, while the Pecking-Order model assumes that the market is rational enough to decipher the signal of overvaluation through the issuance of equity. Relaxing somewhat the assumption of rationality and market efficiency, Baker and Wurgler (2002) developed the market-timing hypothesis. This model is built on a rational manager-irrational market framework with the proposition that the manager is skilled enough to exploit temporary misvaluations in equity prices, issuing equity at peaks to capitalise on a potential overvaluation. The ability of managers to *time* markets by issuing equity at opportune moments has been applied to M&As by Shleifer and Vishny (2003) who propose that stock-acquisitions are in fact driven by these temporary deviations away from the intrinsic valuation of the stock. The rational manager-irrational investor framework has garnered much support in the US market as a rationale for undertaking stock-financed acquisitions.

This chapter combines the decision to issue with acquirer performance in the UK market. A M&A sample is constructed and then stratified into two samples – those that issue securities to the market in the three years before the merger announcement (*Issuers*) and those that do not (*Non-Issuers*). Moreover, the *Issuer* sample is then sub-stratified according to the type of security issued – debt or equity – creating the *Debt Issuer* and *Equity Issuer* samples respectively.

The first hypothesis of the chapter suggests that firms which issue equity before a merger will underperform those that do not. This is built upon the foundations of the predictions of the capital structure literature, specifically the Pecking-Order and Market-Timing models (Myers, 1984; Baker and Wurgler, 2002). Thus equity issuers who conduct M&As three years post-issuance should experience an underperformance relative to those that do not issue equity due to the information conveyed signalling potential overvaluation.

In addition to the negative connotations of issuing equity, the literature has highlighted the benefit of raising debt, specifically in relation to invoking greater managerial discipline through the obligatory constraint that repayment of debt places onto the firm. The free cash flow hypothesis argues that debt issuance signifies a promise by the manager to pay out free cash flow, which is above that of a dividend increase. Debtholders therefore arguably should have stringently ensured the firm is able to repay the loan. Indeed Jensen and Smith (1985) show that transactions that increase the leverage of the firm are met with positive stock market reactions while those that decrease the leverage can see losses up to -9.90%.

The principal argument for the second hypothesis of the chapter is that if a manager raises capital through issuing debt securities, then the firm must make the subsequent loan repayments. Hence, the manager cannot indulge in pecuniary compensation without putting the firm in jeopardy. As a result, managerial and shareholder objectives become closer aligned when the firm issues debt as it is also in the manager's interests to maximise firm value to ensure that the obligatory debt payments are made, so that the manager can retain his/her position.

A firm that decides to issue debt in the market place signals managerial optimism regarding the firm's ability to meet the obligatory payments, while it also indicates that the manager believes he/she has a profitable opportunity to finance. The second proposition of this chapter examines the performance of mergers for firms that issue debt before their deal announcement. Given the empirical debate, the second hypothesis proposes that *Debt Issuers* outperform those that do not issue debt because of the governance and disciplinary increases of debt-monitoring (Jensen, 1986; Jensen and Smith, 1985).

The results indicate that in the short term, *Issuers* significantly underperform *Non-Issuers* in stock-financed M&As by 2.39% (0.029). However, *Equity Issuers* do not perform significantly differently to those that do not issue equity thus no support is found for hypothesis one. We further examined whether size is an explanatory factor and did find support for hypothesis one in the sample of small acquirers, in which equity issuers earn 34% (0.017) less than non-equity issuers at the merger announcement. Furthermore, when we stratify by firm-valuation, the results indicate that glamour acquirers offer support for hypothesis one with those stock-acquirers that have issued equity earning 5.77% (0.031) less than those stock-acquirers in the glamour sample that did not issue equity. In the long-term, stronger support for hypothesis one is found where *Equity Issuers* earn 10.77% (0.012) less from announcement than those acquirers which do not issue equity. This finding is also true for small firms but not for glamour ones over the thirty-six month post-merger period. Thus, the issuance of equity before a merger does lead to an economic and statistical underperformance of acquirers therefore executives focussed on acquiring should avoid the issuance of equity before the merger announcement, and instead could issue equity during the transaction itself.

In relation to the second hypothesis, the results strongly support the issuance of debt. Those acquirers that have issued debt are shown to enjoy a statistically significant better merger performance than those that do not, particularly over the long-term. In the short-term, large acquirers and value acquirers that issue debt earn significantly higher returns that those that do not, some 1.78% (0.041) and 4.76% (0.081) higher respectively. Over the long-term this continues to remain true. *Debt Issuers* earn 19.65% (0.000) higher returns than non-debt issuers (primarily through a reduction of losses circa 8.58% (0.003)). Moreover, *Debt Issuers* significantly outperform *Equity Issuers* long-term by 16.67% (0.000). Finally, the benefits of debt remain true for large firms and for both glamour and value acquirers.

This chapter contributes to the existing literature by providing new research over the impact of capital structure changes prior to M&A announcements. The findings highlight the benefit of debt and provide support for the existing literature showing that the market inherently likes announcements of increases to firm leverage. While gains long-term are not found, losses are significantly reduced and so executives would be better positioning their long-term performance via debt issuance before a merger program is implemented.

There are a number of opportunities that are presented at the end of this chapter. Research opportunities related to deeper analysis of the intended usage of funds at issuance versus post-issuance realized activity would help to provide evidence over whether managers issue to acquire, or acquire because they have issued. Deeper modelling using a granger causality/vector autoregressive framework would help to shed more light in this area. In addition, there are a number of opportunities for modelling the market reaction to the issuance with the announcement return, dependent on the time interval between the two. This could add an additional dimension to the discussions and is indeed a welcome addition for further research.

The chapter is organized as follows: Section 4.1 presents the existing literature pertaining to the wealth creation from merger activity. Section 4.2 outlines the dataset and methodological approach employed. Section 4.3 reports the empirical results. Section 4.4 concludes the chapter.

4.1. Literature Review

Central to this chapter is the marriage of two fields of empirical study – capital structure and agency theory, and their interrelated roles within mergers and acquisitions. The literature review of this chapter is structured accordingly.

4.1.1. Capital Structure: Theoretical Background

Traditional theories related to investment financing centre primarily upon two key models – the Trade-Off model and the Pecking-Order Hypothesis (Myers, 1984; Myers and Majluf, 1984). In the Trade-Off model, managers are expected to *trade-off* the benefits of debt capital derived from the present value of the interest tax shield (i.e. through the tax deductibility of debt) with the simultaneous increase in the firm's probability of financial distress, otherwise known as *bankruptcy*, assuming that the firm's assets and investment projects remain constant (Myers, 1984). Additional to the financial distress costs, the firm is restricted to the level of gearing it can have within its capital structure by the limited assets it holds. The firm must be able to repay the debt it agrees to and must have the assets to prove it can financially afford to repay the amount borrowed. Because of these factors, under the Trade-Off model there lies an optimal level of debt within the firm's capital structure which gives way to the maximum value of the firm (Modigliani and Miller, 1958/1963). Managers alter the level of debt within the firm's capital structure to move towards the firm's optimal debt ratio. Despite its theoretical simplicity, the model fails to explain many findings such as the fact that the most profitable firms within an industry tend to hold the lowest debt ratios (Titman and Wessels, 1988; Shyam-Sunder and Myers, 1999). Also, when a firm is involved in an event that leads to an increasing leverage position, the market meets such occurrences optimistically with positive abnormal returns being experienced (Ghosh and Jain, 2000). Finally, the use of debt largely appears to be preferred to the issuing of seasoned equity regardless of the optimal debt ratio (Myers, 1984). Whilst the theory offers much, it fails to explain these well-known facts and thus provides us with an incomplete picture relating to the firm's financing decisions.

In 1984, Myers addressed the capital structure puzzle and noted that whilst academics have been eager to inform managers of their research, they have done so without a strong knowledge of *actual* firm behaviour. Whilst theory invoked many implications, little was known regarding how firms truly obtained their optimal capital structure and what the effect upon stock prices were. Primarily contrasting the static Trade-Off theory, Myers (1984) explains the Pecking-Order framework as a long-established idea. Referring to Donaldson's (1961) work, Myers (1984) documents evidence related to strong managerial reluctance to issue common equity. This is the key premise of the Pecking-Order framework – the firm uses internally generated funds and should external funds be required, it meets this need by using debt first. External equity issuance ranks the lowest in the model and should only be used in extreme cases. Myers (1984) notes the literature pertaining to investigations of firm's financing behaviour and finds that for most non-financial corporations, the large majority of funds required for investment and capital expenditure needs were sourced from internally generated sources over the period 1973-1982. When external funds were required, debt coveted the largest popularity with only 6% of financing needs being satisfied using equity issues. The explanation offered by the Pecking-Order framework is that managers wish to avoid the signalling involved in external equity/debt issuances and prefer to keep certain information quiet from both investors and rivals. Other authors have sceptically argued that managers simply prefer the freedom of internal financing as compared with the disciplinary interest and agency costs of externally-generated funds.

Considering the impact of asymmetric information upon the capital structure decisions of the firm, Myers and Majluf (1984) presented a model that effectively forces the firm to follow the Pecking-Order theory. The model supposes that the manager has private information regarding the true value of the firm.

Investors are unaware of the true value of the firm and use the financing decisions of the managerial team in order to assess the value of their private information. The theory supposes that if the private information held is favourable, that is the firm is currently undervalued within the market, then the firm will choose not to issue equity in the open market. If it did, then the value of existing shareholdings would be diluted and thus managers would not be acting in their best interests. Alternatively, if the private information held by managers is unfavourable, that is the market has currently overvalued the firm, then the manager would choose to extract money from new shareholders by issuing equity to transfer this wealth to existing shareholders. However, if investors know this to be true, then no external investor would buy overvalued stock. It would be irrational to buy the equity of a firm in which the true value is likely to revert downward. Myers and Majluf (1984) argue that these informational asymmetry problems effectively force the managerial team to follow a Pecking-Order framework as with this knowledge, investors would only subscribe to the new equity issuance of a firm should it have exhausted all of its current debt capacity.

Despite the offering of both, Myers (1984) notes the difficulty in concluding that the evidence found indicates one theory over another. For example, the preference for internal financing sources can also be explained using the Trade-Off theory if we consider high transaction costs associated with external equity as well as the preferential tax treatment of debt payments. Furthermore, there lies an additional third dimension to the debate centred upon the relaxation of full market rationality. One major theoretical offering that has developed of late from the field of Behavioural Finance is Market-Timing – the idea that managers issue equity for no other purpose than to capitalise upon favourable market conditions. The market-timing story largely relies on the past stock performance of the firm prior to the issuance of equity. When firms have performed relatively well in the recent past, then the manager has an incentive to issue equity to capitalize on market overvaluation, optimism and other such factors. The manager is considered to care primarily about existing shareholders and through issuing overvalued equity they transfer wealth to this party from the new contributors. In fact, in a survey conducted, two-thirds of CFO's admit that the relative amount of misvaluation is an important consideration in the decision to issue equity (Graham and Harvey, 2001). Baker and Wurgler (2002) contribute to the debate positing that capital structure is nothing more than the '*cumulative outcome of past attempts to time the equity market*' (Baker and Wurgler, 2002: 29) and find supportive evidence of this conjecture in an investigation of US firms. In this light, the firm need not require an actual purpose *per se* to issue. There need not be the assumption as held in the Trade-Off model and the Pecking-Order framework that the funds raised be used for investment purposes. The manager simply issues to time the equity market and stores the funds in the cash reserves for future use, as and when required.

The decision close to a merger and acquisition to issue equity or debt will undoubtedly convey information to the market and should simultaneously invoke a market reaction. Before we examine how, let's first examine the relationship between firm financing and agency theory.

4.1.2. Agency Theory

4.1.2.1. Theoretical Background of the Principal-Agent Problem

In 1970, Milton Friedman published the seminal article "*The Social Responsibility of Business is to Increase Profits*" igniting a plethora of empirical examinations into what corporate social responsibility truly entails, and how executives can diverge away from their core purpose of maximising shareholder utility. The article, considered the birthplace of modern agency theory, centrally defines the corporate manager as an agent to the principal of the firm, the shareholders, charged with the responsibility of meeting their pre-outlined requirements, be it for shareholder wealth maximisation or some other philanthropic pursuit as inbuilt at the onset of the firm, in the agreement between manager and shareholder. Friedman noted that inherent in such a relationship is the potential for a divergence of interest. The manager, who is asked to behave socially responsibly, makes decisions that can at times deviate away from what would be intrinsically best for shareholders. For example, it is not in the interests of shareholder wealth maximisation that the company undertakes costly policies to reduce pollution but indeed it is an ethically sound corporate act. Similarly, a manager who consciously restrains price increases so as to socially alleviate inflation again makes a decision that benefits society but does not serve the fundamental requirement of the principal. Friedman argued that in such situations, the manager moves away from being an agent and formulates decisions more as a principal. This means that at times, corporate decision-making may not be to the benefit of the shareholders involved.

Jensen and Meckling (1976) outlined an academic framework following the discussions of Friedman (1970) detailing what is the separation of ownership and control and what are its implications. They defined an agency relationship as "*a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involved delegating some decision-making authority to the agent*" (Jensen and Meckling, 1976: 308). Under this provision, the authors indicated that if both the manager and his/her shareholder are rational utility maximisers, then there will be situations in which the agent will not act in the best interests of the principal. Essentially as managers seek to maximise their own utility via higher salaries and so forth, then they can fail to represent the best interests of the principal via three main channels. Firstly, the manager can indulge themselves with pecuniary consumption (i.e. company jets, large plush offices, and so forth). Secondly, the manager may wish to boost the short-term performance of the firm for annual reports. This could lead the manager to make sub-optimal investment decisions by adopting projects of a short-term horizon. Finally the manager can cause a cost to the principal via the non-promotion of lower-ranked staff that display abilities that pose a threat to the manager, who insecurely then blocks the career ascension of the superior individual. Together, these can detrimentally detract from the value of the firm.

The market is rife with examples of the costs of extravagant employees. In sport, the publicly listed football club Arsenal came under fire recently as the club chartered a private jet for the team and staff to travel only 111 miles (approximately 179 kilometres) from London to Norwich in October 2012 (The Telegraph, 2012). In the retail world, Bloomberg (2012) reported the indulgence of Abercrombie and Fitch CEO Michael Jeffries who demands a list of ridiculous requirements when travelling on the company jet, such as clean-shaven male attendants who must dress in Abercrombie polo shirts, boxer briefs and reply "no problem" to any of his requests. Jeffries is widely reported to over-consume the company jet with the board paying him an outlandish $4 million of shareholder money to try to curb his personal use of the jet and his extravagant flying habits (The Daily Beast, 2012) - all of this taking place as the firm's share price continues to slide[13].

Jensen and Meckling (1976) argued that a key determinant of agency costs is the ownership structure of the firm. In a firm in which the manager is the sole owner, then (s)he will make decisions which maximise their own utility which will correspondingly be those decisions which maximise the value of the firm. It is in the interests of the manager for if (s)he does not do this, then (s)he will face the full cost solely. However, when the manager begins to sell equity claims on the firm that will be identical to those held by the aforementioned individual, then the costs of pecuniary consumption will begin to be reduced. For example, Jensen and Meckling (1976) provide the example that a manager who owns 95% of the firm will bear only 95 pence of every £1 of firm expenditure. As the manager's ownership of the firm continues

[13] Corporate governance is an increasingly important aspect of financial markets. The scandals of RBS, HBOS and the like have indicated the conflict of interest prevalent within companies. There lies an opportunity to explore these points further and future research will examine the impact of corporate governance on companies involved in M&As.

to decrease, then there is less and less of an incentive for the manager to monitor his/her own behaviour as this figure continues to fall and thus there is an inverse relationship between managerial ownership and agency costs.[14]

But what happens in such circumstances to firm value? Under our current discussions we are assuming that the manager is raising funds for the firm's investments from the equity market. As (s)he does so, his/her control of the firm falls as discussed. The external investors who provide the firm with its desired capital via an equity investment should rationally take into consideration the agency problem. This means that an external investor should pay a price for the stock of the company that reflects the monitoring costs that must be incurred. It follows that it becomes more costly for a firm to raise capital via equity as the manager's ownership claim falls because rationality implies that equity buyers should realise that the manager's non-pecuniary consumption will simultaneously increase as his/her equity claim falls.

This does not mean that the agency problem does not exist for firms that borrow via issuing debt. A reasonable question could centre on ascertaining why a manager would not simply inject a tiny proportion of the capital required via his/her personal funds and simply borrow the remaining necessary capital, particularly given limited liability, since this would seemingly allow for the manager to avoid agency costs altogether. Considering such a situation where the owner-manager decides to use excessive debt financing, then let us adopt the perspective of a creditor. Given that the firm affords the owner(s) limited liability such that no-personal loss could be experienced should the business fail, then a manager who owns 100% of the firm's equity and finances prospective investments via debt issuance would reasonably hold an incentive to undertake highly risky ventures. This is the result of the fact that if these risky projects paid off, then the manager would reap the rewards…but if they failed such that the firm went bankrupt, then it would be the creditors that would bear the costs due to limited liability – the manager's loss would be limited to his/her initial investment. Even if the bondholders of the firm outlined specific covenants, none could ever encompass all conditions required since managerial decision-making is a continual process. Bankruptcy itself is not a costless process and it would be the manager-owner who bears these costs. Furthermore, portfolio theory indicates the benefits of diversification through a

[14] There is undoubtedly a link between corporate governance, agency theory and wider merger waves. When the merger is undertaken in a booming market at a time when many firms are acquiring, firms can get away with making bad decisions. However, this is not true when the market is contracting and it is for this reason that we see a rise in mergers in economic expansions and a fall in mergers in economic contractions. A number of research papers have likened the decision to merge with waves of crime. Criminals are much more likely to escape punishment if there commit their crime when there are a lot of crimes taking place, as the police are unable to convict and punish all. The same is true for acquirers – analysts and investors are unable to identify every deal as good or bad when there are many due to inability to process all information in such a short time frame.

reduction of risk without a reduction to return which simply is a weighted function of the investments adopted. A manager who solely invested in his/her firm would bear more risk than would be required to achieve a given level of return as the portfolio would be inefficient. The agency costs of debt (i.e. the opportunity wealth loss given its influence over the investment decisions of the manager, the monitoring and bonding costs of the bondholders, and the financial distress costs) as well as portfolio theory render the aforementioned incentive for heavy debt financing irrational. For this reason we typically see a mixture of debt and equity in a firm's capital structure to counter and spread the agency costs of debt and equity.

The ramifications of these articles and the agency costs of equity and debt were and continue to be vast. If indeed managers are capable of making decisions that are not centrally motivated by a desire to meet the needs and desires of the shareholders they represent, then how can the firm's stakeholders mitigate these agency costs? Empirical research offers that external stakeholders can monitor the actions of the manager via the adoption of measures such as auditing, budget controls and effective incentive compensation systems that can converge the interests of the conflicting parties. Conceptually, it is not difficult for a firm to provide the correct monetary incentives to align the objective of managers – the board can require that the manager holds substantial levels of the firms stock, can pay the manager on a performance basis such that big rewards are attainable for superior performance and big losses for the reverse, and finally the manager can face the threat of replacement should they not meet set targets (Jensen and Murphy, 1990b).

Implementation of this however can be extremely difficult. Essentially, the firm's compensation policy should be designed such that the manager is afforded enough of an incentive to select those investments which will maximise shareholder wealth (Jensen and Murphy, 1990). However, Jensen and Murphy (1990b) highlighted that it is the way in which managers are compensated that is crucial to mitigating agency theory. Their work recommended the use of stock options. These would allow for managers to purchase equity in the firm at a discounted price thus motivating the manager to increase the value of the firm. However, in practice, this led to short-sightedness on the part of the manager who sought to raise the stock price, at times even artificially, to exercise their stock options realising a gain before leaving the firm for another to repeat the process, all the while destroying shareholder value. Jensen (2001) provides a good discussion of why this is the case[15] recently recommending cost-of-capital stock options as a more reasonable alternative.

[15] Jensen (2001) documents an experience with a Fortune 500 firm. The manager of the said firm proposed a five-year project which would raise the value of the stock of the firm from \$57 to \$100. However, the cost of equity for

4.1.2.2. Agency Theory and Merger Performance

Jensen (1986) applied agency theory to the financing/payout decisions of managers. He outlined that the payout policy (i.e. to pay or not to pay dividends) of the firm can have a direct impact on the returns for shareholders. The free cash flows of the firm, defined as the cash holdings of the firm that exceed the firm's profitable investment opportunity set, are modelled as a measure of agency theory mitigation. Jensen (1986) argues that if the firm decides to pay out this excess cash, then the manager will more than likely have to raise financing at a later date in capital markets. This resultantly infers that a manager who pays out to shareholders will be monitored by external capital markets at a later date when a new investment opportunity does arise thus requiring new capital, which at that stage will be raised externally thus incurring managerial monitoring. Firms that finance internally via retention of free cash flow via non-payment to shareholders will thus avoid the monitoring of capital markets. In this sense it could be preliminarily suggested that firms that do not issue prior to a merger would not incur additional monitoring costs, and thus arguably may incur higher agency costs.

The free cash flow hypothesis writes that the issuance of debt signifies a promise, indeed an obligation, by the manager to pay out free cash flow which is above that of a dividend increase, for the manager is under no obligation in the latter to keep the dividend payout at the higher level. BP, following completion of the sale of its stake in the joint venture TNK-BP to Rosneft, announced it would increase its dividend, signalling managerial optimism that the firm has turned a corner following the disastrous Deepwater Horizon oil spill in 2010 (FT.com, 2012). But while the markets react positively, most do so conservatively. The market needs to be convinced over time that the dividend increase does indeed represent the onset of a long-term positive trend for the firm. Debt on the other hand suffers from little scepticism for debtholders who arguably should have stringently examined the issuer's ability to repay the loan. Indeed Jensen and Smith (1985) show that transactions which increase firm leverage are met with positive stock market reactions while those which decrease firm leverage can endure losses up to -9.90%. In relation to merger activity, Jensen (1986) argues that a firm that finances its transaction with cash are "*more likely to undertake low-benefit or even value-destroying mergers*" (Jensen, 1986: 11) since the deal offers an alternative way for the manager to avoid paying out to shareholders.

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the firm net of dividends was 12.5% which would require that the stock price should have grown to \$57 x $(1.125)^5$ = \$102.72. The board adopted the project which destroyed shareholder value by \$2.72 per share but afforded the manager a gain of \$43 through the fact that the stock options which formed part of his payment could be exercised at the pre-investment price of \$57.

In related work, Carline et al. (2009: 1829) ask the pertinent question regarding how the '*the corporate governance profiles of acquiring firms directly influence operating performance outcomes of merger decisions*' using a sample of deals taken from the UK market between 1985 and 1994. They reason that this topic has important ramifications due to the large economic size of modern transactions, as well as the marked change in market beliefs regarding the operating performance effects of the combinations. Their work shows that operating performance changes for firms are directly curvilinear to the level of director stock ownership. Furthermore, the better the quality of the managerial team (as measured using the Q-ratio) relative to the target, the smaller the effect exerted upon operating performance. Finally, the higher the level of cash held by the acquirer is, the worse the operating performance of the combined firm. Correspondingly, the paper indicates that acquirers' corporate governance profiles do indeed have an economic and statistically significant impact on operating performance changes post-merger.

While Carline et al. (2009) find evidence indicating the importance of corporate governance, Duchin and Schmidt (2011) decompose this according to whether the deal is initiated inside or outside of a merger wave (i.e. periods of high merger activity as measured by the volume of transactions) in a comprehensive study relating to merger uncertainty, agency theory and acquisition performance.

Duchin and Schmidt (2011) develop a number of intuitive hypotheses. Firstly, they state that '*the quality of analysis of any individual merger may decrease with the number of mergers*' (Duchin and Schmidt, 2011: 2). The intuition behind this is that as the volume of transactions undertaken increases, it becomes increasingly difficult for analysts and investors to effectively evaluate the proposed combination. In this way, as the number of deals increases, correspondingly the quality of analysis due to limited resources decreases. However, it is also noted that the lower the number of comparable deals, the greater the range for analyst error as there are fewer deals available as a benchmark for firm performance. As the volume of deals increases, arguably so does the competition for targets such that analyst forecasts could potentially become more important, and thus resultantly may see an increase in quality.

In addition to the examinations of the quality of analyst reporting during merger waves, the study also investigates the impact of agency theory and the respective ability of the market to remove bad managers following poor transactions during a merger wave. Using analogies from the crime literature, Duchin and Schmidt (2011) contend that merger waves offer managers an opportunity to share the blame of unsuccessful transactions. The belief is that the number of agency-driven acquisitions can increase during merger waves due to the poorer quality of analyst forecasts coupled with heightened levels of uncertainty.

Similar to criminals being more likely to 'get away with' their offences during periods of high crime, managers are arguably more likely to be able to undertake poorer deals during waves that serve to maximise their own utility rather than that of their shareholders.

Empirically, the study separates its sample of US deals between 1980 and 2009 according to the volume of mergers. In-wave acquirers are shown to have '*annualized buy-and-hold abnormal returns…on average…4.65-6.25 percentage points lower than other acquirers*' (Duchin and Schmidt, 2011: 2). In relation to their propositions regarding a high level of agency-driven transactions during merger waves, the results indicate that in-wave acquirers have weaker governance than out-of-wave acquirers. The underperformance of in-wave acquirers as compared with others alongside poorer corporate governance at these firms is reasoned as being evidential of the inability of market participants to fully process the relevant information during periods of high merger volume.

The school of behavioural finance has also highlighted the role of managerial heuristics for explaining mergers and acquisitions and agency costs. Roll (1986) advanced the hubris hypothesis to help ascertain why firms continue to merge. The hubris hypothesis writes that managers can sometimes overweight the precision of their valuation of the target firm, which can lead to overpayment and an overestimated value for potential synergies. Malmendier and Tate (2005) also find that managers can overestimate their abilities, particularly in relation to corporate investment decisions. Their work shows that overconfident managers can overestimate the returns from their investment projects to the detriment of shareholders. In each situation, if the manager behaves less than (s)he is rationally expected to, then shareholders will face the costs.

4.1.3. Method of Payment in Mergers and Acquisitions

The revelation in the mid-eighties that the method of a project's financing provided the market with private information that had previously been known only to the managerial team of an organization gave birth to a stream of research, applying the intuitions of Myers and Majluf (1984) to a host of investment projects. In 1987, Travlos investigated the impact that the method of payment had upon the wealth creation related to M&A activity. Travlos (1987) recognized that the previous inconclusive literature regarding the wealth creation (or indeed destruction) associated with M&A activity could be as a result of the information hypothesis as outlined by a host of scholars (see Myers and Majluf, 1984; Wansley *et al.*, 1987; Gao, 2011).

The information hypothesis holds that there is an asymmetry of information between managers and outside investors. The decisions and actions of the managerial team therefore convey signals to the market about this inside information. As explained in the Pecking-Order framework for understanding capital structure decisions, an investment's financing source will provide the market with a better understanding of the true intrinsic value of the firm. If the managerial team believes the firm to be overvalued, then to finance their M&A activity, they will use equity. Conversely, if the private information relays favourable news that the firm is undervalued, then the firm will want to share this with the market and so will conduct a M&A using cash to signal this favourable misvaluation. In both cases, we assume that the managerial team has a stronger alliance to existing shareholders and makes decisions so as to maximize their wealth. The firm finances its investments in ways which will maximise the profit to be enjoyed by existing shareholders.

Draper and Paudyal (2008) argue that this information asymmetry is actually the very basis for undervalued firm's to conduct acquisitions in order to draw attention from the market so as to raise their market value. Undervalued acquirers with high information asymmetry produce the largest gains in their work as they benefit from both the synergistic benefits of the combination along with the revaluation following the markets upward correction of the firm's value. Support for this conjecture is found and further substantiated with evidence that an initial bid for an undervalued acquirer generates the largest returns. Subsequent bids made by frequent acquirers see reduced gains and this is explained as being evidential of the fact that it is the initial bid which additionally benefits from the revaluation.

Wealth creation from M&A activity is therefore argued to be strongly linked to the level of information asymmetry of a firm with information being conveyed through a firm's financing policy. The method of financing a M&A deal can therefore be viewed as a vehicle in which the firm releases this private information to the market. Travlos (1987) conjectures that once studies have controlled for the method of payment, the prior inconclusive evidence could be explained. Travlos (1987) shows that those firms in the US which use common stock in order to finance their acquisitions experience significant losses of -0.69% upon the date of announcement. Conversely, those acquirers using cash as the medium of payment earn on average normal rates of return. Additionally, the difference in means between stock-financed and cash-financed deals is also statistically significant. These results are robust to whether the deal continues to succeed or fail and also to the type of deal conducted (i.e. merger or tender offer).

A large amount of research followed quantifying Travlos' (1987) findings that public stock acquisitions convey negative information of overvaluation to the market, subsequently invoking poor stock performance of acquiring firms. Much of the literature is unanimous over the fact that target firm's gain (Mueller, 1985; Jensen and Ruback, 1983; Hviid and Prendergast, 1993; DePamphilis, 2008; Bradley *et al.*, 1983) but the value creation for bidding firm's is not so decided. Jensen and Ruback (1983), in a survey of the existing literature, write that acquirers do not lose but rather invariably break even.

In 1998, Chang readdressed the information hypothesis in relation to the stock-financed acquisition of privately-held target firms. When it is recognised that most private targets are held by a few shareholders then we can see that such corporate events are akin to private placements of equity as the target firm becomes a major shareholder in the acquirer post-acquisition. Chang (1998) finds evidence that acquirers gain when purchasing a privately-held firm using stock. The results are explained as being due in part to information asymmetry and, once again, signalling. The acceptance of the acquirers stock by the target conveys to the market that the information privately held by the acquirer must be positive so as to convince the target to accept the equity offered which results in a favourable market reaction.

Focussing upon the UK, Antoniou *et al.* (2007) found supportive evidence in the short-run. When acquiring public targets using stock, acquirers are shown to experience significant wealth losses while when acquiring a private target or a subsidiary of a public company using stock then the acquirer is shown to experience significant wealth gains. However, these results do not transpire into the long-run where losses are experienced regardless of target status.

Loughran and Vijh (1997) argue that mergers are generally not wealth-maximising vehicles for shareholders. They challenge the universal acceptance of target gains and show that for those receiving stock, the post-acquisition abnormal returns are statistically significantly negative at -24.30%. Investment strategies are provided to investors, who are advised to sell their holdings when they receive equity as payment for their firm and to then use the cash proceeds to buy the acquirer's stock independently should they wish to retain an equity stake.

Of late, research has begun to investigate the impact of market-timing in light of the previous evidence. If we accept that the decisions made by the firm convey certain levels and types of information to the market, then we can assume that managers, who are aware of the signals their actions send, could be guilty of attempting to time the market for the most opportune moment at which to deliver certain announcements so as to gain the most from the information being delivered. Gao (2011) writes that a firm which holds high corporate cash reserves, and yet decides to issue to invest, sends a strong signal to the market of overvaluation. Following Myers and Majluf (1984), the firm should follow a pecking-order of financing – ranging from internal cash to the raising of external equity – due to the information conveyed in the decision. Correspondingly, if this holds, then Gao (2011) seeks to ascertain what could induce a acquirer with high cash reserves to use stock to finance its merger, and subsequently what could motivate a target firm to accept the stock offer under such conditions.

In relation to the first research objective, the paper documents the potential for overpayment through the use of cash in a merger transaction. If indeed the acquirer is overvalued when using equity, then portfolio theory tells us that firms will inevitably face a market-wide component within that misvalaution. If this holds, then the target arguably will also be somewhat overvalued. The two firms are unable to distinguish what part of their misvaluation is attributable to firm-specific rather than market-wide components and thus a acquirer which believes themselves to be overvalued should rationally not use cash in such cases for it could lead to the target receiving an excessive premium. Thus, despite the signal sent to the market, it is still reasonable for a cash-rich acquirer to attempt to use stock as a financing method in a proposed transaction. On the other side of the transaction, the managerial team of the target should see recognise this. While they may be unable to coerce the acquirer to pay 100% cash, the managerial team should attempt to remove some of the valuation risk of the acquirer via part cash payment.

Despite this intuitive line of reasoning, the empirical results show that a high cash-rich acquirer is less likely to pay with stock, consistent with '*the view that value-maximising target managers make efforts to remove "lemon" acquirers by requesting cash*' (Gao, 2011: 790). However, when market-wide misvaluation is higher than participants realise, "*target managers overestimate synergies and accept too many stock offers*" (Gao, 2011: 791). Because of the signal involved under the asymmetric information framework, stock offers made by cash-rich acquirers receive a poorer announcement reaction.

This chapter intends to build upon this existing literature and provide empirical evidence related to the market reaction of deals for acquirers that issue prior to a merger deal versus those which do not.

4.1.4. Issuance Activity around Mergers and Acquisitions

Thus far, the empirical evidence reviewed has highlighted the importance of the financing decision of mergers due to the information conveyed in the decision. Theories emanating from the field of capital structure have highlighted that the issue of equity (either directly to the market, or indirectly via a merger) conveys to the market that the firm is overvalued (Myers and Majluf, 1985; Travlos, 1987; Gao, 2011) while the issuance of debt can help to reduce agency costs (Jensen, 1986, Duchin and Schmidt, 2011) through increased obligations for the firm, and the potential for external monitoring.

Examining merger activity and the issuance of debt and equity has become increasingly encouraged over the past few years, largely due to the mixed evidence documented earlier over which financing theory holds - i.e. trade-off, pecking-order or market-timing. Mergers have been cited as the perfect investment decision with which to examine the validity of capital structure theories as they notably represent a large investment on the part of the acquirer. It is common in these situations that financing has to be raised externally and thus this proves an ideal testing ground for the validity of capital structure theories. Despite this intuition, very few papers have directly examined the issuance activity of firms and the post-merger performance of acquirers. To our knowledge, we have found no paper which directly addresses this issue, and it is in this void that we aim to make a contribution with the second chapter of this thesis.

Selvarajah and Ursel (2012) examine the determinants of debt financing in a time-series analysis related to the US market. They specify five key determinants within their model. Firstly, they directly examine whether merger activity is a determinant of debt changes in firms as measured by the sum of monthly deal dollar values for transactions worth more than $25 million, scaled by GDP. Secondly, they examine the trade-off theory via a measure of average net property, plant and equipment (PPE) in their second variable "Tangible". Thirdly, they measure the market-timing theory of capital structure using the run-up performance of the US market index S&P500 in the two months prior to the month of observation. Finally, the pecking-order theory of a firm's financing decision is modelled using a variable entitled "Dispersion", measured two ways – firstly as the average of the coefficient of variation of analyst earnings estimates over one year for all firms; and secondly, using the S&P 500 VIX index, used to measure the volatility of the equity index.

Their results indicate that mergers on the whole do not have a significant impact upon debt financing. However when the variable is split according to whether the deal exceeds 1% of GDP (termed a "megamerger"), the results show that very high merger activity (although arguably it is merger value due to the nature of the classification of this variable) indicates a significant impact upon corporate debt-financing usage. The variables for the trade-off and pecking-order theories are supported with statistical significance of the expected sign.

Earlier work from Ghosh and Jain (2000) examines leverage changes around merger activity, specifically post-merger. There are two schools of thought governing firm leverage changes following the completion of a merger. Firstly, the combined firm can seek to utilise its larger debt capacity following the combination. The combined firm may wish to increase its leverage to benefit from the additional value of debt-financing (i.e. extracted from the tax deductibility of interest payments on debt (see Graham (1996)) up until the new debt capacity has been met. Secondly, prior to the merger, the two firms may have under-utilised their debt capacity such that post-merger the firm wishes to readdress this. Furthermore, it is recognised that the combination increases the size of each party and thus '*existing bondholders are better off because debt becomes relatively safer*' (Ghosh and Jain, 2000: 378).

The existing evidence is mixed over the tax-benefits of debt via mergers. Hayn (1989) finds evidence in favour of tax benefits extracted via merger activity by target shareholders, arguing that tax considerations can be a key determinant of merger activity. Auerbach and Reishus (1988) investigate the tax benefits for both targets and acquirers but find that tax is not a primary motivator for their sample. Ghosh and Jain (2000) update this research and examine whether the '*the present value of future benefits from expected increases in leverage are capitalised at the time of the merger announcement*' (Ghosh and Jain, 2000: 378). The results indicate that an '*increase in financial leverage results from an increase in debt capacity*' (Ghosh and Jain, 2000: 379), and that respective leverage increases following a merger deal are due to increases in the debt capacity of merged firms.

It is not just debt issuance that can potentially have an impact upon the performance of merging firms. As outlined earlier, Baker and Wurgler (2002) contend that a firm's capital structure is nothing more than the '*cumulative outcome of past attempts to time the equity market*' (Baker and Wurgler, 2002: 29). There need not be the assumption as held in the Trade-Off model and the Pecking-Order framework that the funds raised be used for investment purposes. The manager simply issues to time the equity market and stores the funds in the cash reserves for future use, as and when required. But what happens when the firm does use these funds to invest? Or indeed what happens to the performance of the firm's investments regardless of whether the issued funds are used to that end? This chapter aims to present the announcement reaction and post-merger performance of acquirers that issue versus those that do not prior to a merger deal.

4.1.5. Hypotheses Development

A predominant concern within the empirical analysis of late has been attempting to answer why M&A activity continues to grow given evidence documenting losses for the shareholders of acquiring firms. The literature is agreed in its conclusion that target shareholders gain from mergers and acquisitions (Jensen and Ruback, 1983). However, the motivations and performance of acquirer is still under review (Mueller, 1985; Loughran and Vijh, 1997).

The first chapter of this thesis examined the performance of acquiring firms to add to this ongoing debate. The methodological approach examined the market-timing theory of mergers with successfully completed deals comparatively examined against failed ones, controlling for the endogeneity of the failure (Savor and Lu, 2009). It was shown that in the short-term, acquirers create value with the outperformance of successful acquirers relative to those that fail. However, the long-term results displayed a reversal. It was concluded that again, in the long-term, despite this new methodological examination, acquirers continue to destroy shareholder value.

Given this, we aimed to develop this further in the second chapter. The market-timing theory examined for the UK market in the first chapter requires that firms use equity as the payment method for transactions. While in the US, there are a marked number of deals that do employ 100% equity-financing, the UK does not display the same tendency. While there are some deals that are financed with 100% equity, a large majority use cash. But where does this cash come from? We examine the issuance activity of acquirers in the UK market to unearth evidence in relation to this issue.

Specifically, we examine the performance of firms that issue prior to a merger versus those that do not. The first proposition of this paper concerns the issuance activity of acquirers. The literature suggests that merger financing provides the market with information regarding the manager's viewpoint of the firm's value. Myers and Majluf (1984) explain that a firm's financing choice conveys the managerial belief regarding the value of the firm. In their pecking-order theory of corporate investment financing, firms should use internal funds before moving to raise capital externally. Externally, the firm should then seek to raise debt and should issue equity as a last resort. The financial manager should begin by raising external funds through issuing the safest security first, as this will hold the lowest cost for the firm. In this way, if equity is issued, which is the lowest in the pecking order, then the cost must not be as heavy as imagined largely through firm overvaluation. A firm that issues equity would rationally only do so if the cost of doing so is beneficial to the owners of the firm. This only happens when the market value of the firm's stock is higher than its intrinsic value, arguably only truly known by the management. Otherwise, it would be more beneficial for funds to be raised from other sources. Thus when equity is issued, it sends a negative signal to the market.

Many previous empirical studies suggest that UK deals are predominantly cash-financed (Doukas and Petmezas, 2007; Petmezas, 2009) sidestepping this negative information signal and yet Chapter One of this thesis shows that the performance of UK mergers is not significantly better or worse than their US counterparts who prefer equity. It could be the case following the intuition of the asymmetric information hypothesis that UK firms issuing equity at some earlier date before their merger may simply have been timing the market under the contentions of Baker and Wurgler (2002), without the necessary investment plans. It could be plausible to believe that the later merger is undertaken as a way to use the excess cash flow of the firm (Jensen, 1986). It is beyond the scope of this work to examine the causality of this relationship. However, if the performance of mergers undertaken by equity issuers was significantly lower than those that do not issue, then it could provide evidence that could serve as a starting platform for deeper investigation. The underperformance could be a reflection of the lack of true direction for the managerial team who conduct a merger simply because they have the funds to do so.

It is recognised that it could also be the case that firms that do not issue prior to a merger will not incur additional monitoring costs particularly when the security issued is debt. Arguably, in this line of thought, the firm may incur higher agency costs (Jensen, 1986; Duchin and Schmidt, 2011). This could lead to a poorer quality merger, which destroys corporate value.

The performance of issuer relative to non-issuer will be dependent upon the type of security that is issued. The key focus therefore in this chapter is to ascertain the impact of pre-deal debt versus equity issuance behaviour upon short-term and long-term shareholder gains, and the differential performance between the two sub-samples. The implications of leading capital structure theories differ according to whether the firm borrows or issues more stock.

In the Trade-Off model, managers *trade-off* the benefits of debt capital (i.e. through the tax deductibility of interest payments of debt in the tax-shield) with the simultaneous increase in the firm's probability of financial distress, ceteris paribus (Myers, 1984). Additional to the financial distress costs, the firm is restricted to the level of gearing it can have within its capital structure by the limited assets it holds (i.e. its debt capacity). The firm must be able to repay the debt it agrees to and must have the assets to prove it can financially afford to repay the amount borrowed. Because of these factors, under the Trade-Off model there lies an optimal level of debt within the firm's capital structure which gives way to the maximum value of the firm (Modigliani and Miller, 1958/1963; Miller, 1977, Myers, 1984). Managers alter the level of debt within the firm's capital structure to move towards the firm's optimal debt ratio.

The pecking-order theory of Myers and Majluf (1984) supposes that if the private information held is favourable, that is the firm is currently undervalued within the market, then the firm will choose not to issue equity in the open market. If it did, then the value of existing shareholders holdings would be depressed and thus managers would not be acting in their best interests. Alternatively, if the private information held indicates that the firm is currently overvalued, then the manager would choose to extract money from new shareholders by issuing equity to transfer this wealth to existing shareholders. However, if investors know this to be true, then no external investor will buy overvalued stock. It would be irrational to buy the equity of a firm in which the true value is going to revert downward. Myers and Majluf (1984) argue that these informational asymmetry problems effectively force the managerial team to follow a Pecking-Order framework as with this knowledge, investors would only subscribe to the new equity issuance of a firm should it have exhausted all of its current debt capacity, such that debt should be issued before equity.

Finally, Baker and Wurgler (2002) in the market-timing theory of capital structure build upon the asymmetric information approach of Myers and Majluf (1984) but relax the condition that firms have a purpose to issue. Myers and Majluf (1984) build a model in which the manager has an investment project that requires financing. Baker and Wurgler (2002) however build a model that says that firms issue equity when it is favourable to do so (i.e. when the equity is overvalued) such that capital structure decisions are nothing more than a cumulative attempt to time the market. It could be that a manager who believes his/her firm to be overvalued may not wish to reveal this in an acquisition (as this could potentially result in overpayment for a target) and as a result, the firm may resort to raising cash proceeds from equity issuance at some earlier date to benefit from the bargaining power of cash in the merger. In relation to merger activity, Jensen (1986) argues that a firm which finances the transaction with cash is "*more likely to* *undertake low-benefit or even value-destroying mergers*" (Jensen, 1986: 11) since the deal offers another way for the manager to avoid paying out to shareholders.[16] If a firm has built up corporate cash reserves through timing the market, then this leads us to the first testable proposition of this second chapter:

Hypothesis 1: Firms which issue equity prior to a merger will underperform those which do not.

Doukas et al. (2010) find that firms issue debt in hot capital markets to capitalise on favourable market conditions. The existing literature to-date has not empirically examined the market's reaction to merger deals for firms that issue debt versus those which do not. With the predominance of debt issuance in hot market conditions as shown by Doukas et al. (2010), firms may resort to raising debt so as to fund corporate expansion and prolong favourable mispricing.

Agency theory was discussed earlier in this chapter. The evidence suggested that the issuance of debt invokes greater managerial discipline. The firm has an obligation to repay its debt. Firms that finance internally via retention of free cash flow via non-payment to shareholders will avoid the monitoring of capital markets. The free cash flow hypothesis writes that the issuance of debt signifies a promise, indeed an obligation, by the manager to pay out free cash flow that is above that of a dividend increase. Debtholders arguably should have stringently examined the issuer's ability to repay the loan. Indeed Jensen and Smith (1985) show that transactions that increase the leverage of the firm are met with positive stock market reactions while those that decrease the leverage can see losses up to -9.90%.

If a manager decides to raise capital via debt issuance, then the firm must make the loan repayments. The manager does not have the luxury to indulge in pecuniary compensation. Hence, the objectives of the manager and shareholder become closer aligned when the firm includes debt in its capital structure as it is also in the manager's interests to maximise firm value to ensure that the obligatory debt payments are made, so that the manager can retain his/her position.

The seminal study of Modigliani and Miller (1963) relaxed the earlier assumption of no-taxes in the capital structure irrelevance theorem of 1958. The conclusion of the 1958 work, under no-taxes, indicated that the manager cannot affect the value of the firm via changing the debt/equity mix. The authors reasoned in their first proposition that the value of a levered firm (i.e. one which includes debt) is equal to

[16] Future research will examine whether the intended use of proceeds following equity issuance matches the post-issuance activity.

the value of the unlevered firm (i.e. one which is financed solely with equity), because the total cash flows paid out by the firm remained the same in either. The only difference is the end receiver. In the unlevered firm, all of the payout is received by the equityholders whereas in the levered firm, this payout is split between debt-holders and equity-holders. However, the total payout remains the same in each firm.

In 1963, Modigliani and Miller relaxed the assumption of no taxes in their model. Specifically, they examined the benefits of debt-financing in a world where corporate tax exists. In this scenario, the total payout of a levered firm can exceed that of an unlevered one, by the present value of the interest rate tax shield. This tax shield arises from the fact that interest payments are deducted from firm earnings before tax is levied. So the levered firm does not pay tax on its payout to debt-holders. This causes an incentive to include tax into the capital structure of the firm.

Research has recognised that while there is an incentive to include debt in a firm's financing structure, doing so increases the financial distress costs for the firm. As the potential for bankruptcy increases in proportion with the amount of debt held in the capital structure, there exists a trade-off between the benefits of the present value of the tax shield against the present value of financial distress. Firms, under the trade-off theory manage their debt-to-equity ratios by changing the amount of debt in their capital structure under these conditions.

The optimal amount of debt however will also be influenced by agency theory. As mentioned, the issuance of debt is met positively by the firm's shareholders for it signals positive information regarding the future of the firm, such that it conveys that the manager believes the firm will be able to meet the debt obligation. The benefit of a managers interests being aligned with those of the shareholders is thus positively received in the market. However, there also exists an agency cost, primarily through the loss of financial flexibility. The manager will choose to avoid debt if he/she recognises the increased monitoring of debt, so as to retain pecuniary freedom. Furthermore, empirical evidence also indicates that managers prefer to retain debt capacity in case a profitable investment opportunity arises in the future. If the firm has utilised its debt capacity, then in the future when this opportunity arises, the manager may be forced to raise capital via the equity market. It is uncertain as to whether this would be an optimal decision for the firm at that time, for what if the firm has been undervalued in the market place at the time it is required to raise financing with the only option left being the sub-optimal issuance of equity. It would not be optimal to raise cash via equity issuance that could result in the firm having to pass up a positive NPV project.

So, a firm that decides to issue debt in the market place signals managerial optimism regarding the firm's ability to meet the obligatory payments, while it also indicates that the manager believes he/she has a profitable opportunity to finance. The second proposition of this chapter examines the performance of mergers for firms that issue debt before their deal announcement. Given the empirical debate, we are led to the second testable hypothesis:

Hypothesis 2: Firms that raise debt prior to conducting a merger will perform better in terms of wealth generation than those that do not due to the governance increases of debt-monitoring and firm obligations.

4.2. Data and Methodology

4.2.1. Data

The core of the data analysed within this work is sourced from Thomson One Banker SDC and DataStream. Thomson One Banker SDC indicates that there were 437,309 M&A deals involving UK public acquirers during the period 01/01/1990-31/12/2009. To make it into the final database, the deal must satisfy the following criteria:

1. The acquirer must be a publicly listed firm.
2. The deal value must be at least £1m.
3. The deal must occur within the period 01/01/1990-31/12/2009 so that we have three-years post-merger data for the long-run analysis.
4. The deal is not within the financials, utilities and government agencies sectors.
5. Information relating to share price, market-to-book, price-to-earnings and market value data for the acquirer is available from Thomson DataStream as required.
6. Payment-information is known (i.e. cash, stock or mixed).

Upon completion of a deal, a successful acquirer must hold at least 51% of the target stock, i.e. the acquirer has an equal or a majority of share capital of the target while prior to the deal the acquirer is required to have held less than 50%. For our empirical merger performance analysis, we download the relevant market and accounting data from DataStream so that for the final database we have the necessary information related to the return and price indices of the stock, the firm's market to book value, price to earnings and earnings per share ratios as well as the acquirer's market value. The final merger sample consists of 5,175 deals where the acquirer was a UK listed firm. Of these 5,175 deals, 1802 were financed with cash, 222 were financed with equity and 3151 were financed with a mixture of equity and cash.

In terms of the issuance behaviour of acquirers prior to announcing their merger deals, a comprehensive list of all equity and debt issued securities within the UK were collected over the sample period including three years before the first listed acquisition in the dataset. We follow the categorisation of debt and equity securities by Thomson One Banker. Debt issuance covers the issue of securities including non-convertible bonds, mortgage or asset backed securities, bonds pipeline and registrations, medium-term notes and debt private placements. Equity issuance covers the issue of securities including common stock, convertible, equity pipeline and registrations and equity private placements. The acquirer is matched to their prior issuances using their corresponding CUSIP number. Any issuances post-merger are removed and we are left with a dataset matching the acquirers to their earlier equity and debt issues. We then categorise each acquirer as issuing either debt or equity within three years before their merger date[17]. The performance of these portfolios is then compared with the remaining samples that have not issued.

From our sample of 5,175 deals, 2,135 involve a firm that issues before the deal announcement (labelled 'issuers') while the remaining 3,040 are not listed in the database as having issued either debt or equity (labelled 'non-issuers'). Finally, once we classify the issuance data according to the type of security issued, we find that 1,889 firms issue equity before their merger and 459 issue debt. This is above the 2,135 issuers sample and we find this is because there are 213 firms that issue both debt and equity. We thus complete our analysis by also creating sub-samples that remove firms that issue both debt and equity.

This chapter's main investigation is the merger announcement and long-run performance of firms that issue relative to those that do not. Thus financing activity plays a pivotal role in this study. The sample from Thomson One Banker indicates the type of security issued. Table 31 indicates the classification of equity and debt financing.

In the early nineties, the equity market was poor following the boom of the eighties, and the collapse of the exchange-rate mechanism. In the late-nineties, firms began to use more debt financing but the stock market was also beginning to boom once more and as a result we see a large increase in the issuance of

[17] The analysis is repeated for issuances twelve months before the acquisition and twenty-four months before. The results remain largely unchanged. However, thirty-six months are reported due to the length of time it takes to file issuance documentation, enlist intermediary support, source a target, and structure a deal before the deal reaches announcement.

both debt and equity securities. As the stock market began to enter a recessionary period around 2003 following the collapse of the dot.com bubble and the 9/11 atrocities, there was a fall in the issuance activity of acquirers. This reversed by 2004 where a continual rise in the level of issuance up until 2007, as capital markets began to contract. Our sample ends in 2009 to ensure we have three-years of data for our long-term merger analysis. The merger sample shows no market issuance by acquirers in the years 2008 and 2009. We reason this is due to the severe market contraction in the credit crisis which reduced firm investment and restricted the firm's ability to raise external financing.

Finally, based on the extant literature, we also consider a range of standardised control variables in the multivariate analysis. These include relative size (employed by Asquith *et al.*, 1983; Jensen and Ruback, 1983; Antoniou *et al.*, 2007; Kiymaz, 2004), target status (see Travlos, 1987; Chang, 1998; Draper and Paudyal, 2006), method of payment (see Travlos, 1987; Fishman, 1989; Linn and Switzer, 2001), acquirer size and value (see Rau and Vermaelen, 1998; Sudarsanam and Mahate, 2003), domestic/foreign target (see Doukas and Kan, 2004) and related/unrelated target deals (see Chatterjee, 1986; Morck et al., 1988). These will be outlined in Section 4.2.2.3.

4.2.2. Methodology

The performance of the acquiring firms is measured in terms of both the short-run and long-run abnormal return's (AR) generated by the M&A deal. The short-run analysis centres on a five-day window employing the Market Adjusted Abnormal Return approach (Seiler 2004; Brown and Warner, 1985) whilst the long-run is assessed using the Buy-and-Hold Abnormal Return (BHAR) approach favoured by Buchheim *et al.* (2001). The analyses aim to identify what the short-run market reactions are in terms of abnormal return's (ARs) generated by acquirers that have issued before their merger versus those that have not, before determining whether these transpire into long-run gains for the shareholder group.

4.2.2.1. Short-Term Analysis

The short-run analysis is conducted as an event-study using a window of five days (-2,+2) around the M&A announcement date. We calculate the normal returns[18] of the firm using daily price index data as follows:

[18] Arithmetic returns are also calculated and the results remain unchanged.

$$R_i = \ln\left(\frac{P_t}{P_{t-1}}\right)$$

Where R_i relates to the daily normal return of stock i while P_t and refer to the stock price on day t and $t-1$ respectively.

In determining short-run AR's, we note the abundant methods available (Sharpe, 1964; Lintner, 1965; Lyon et al., 1999; Brown and Warner, 1985). Due to the restrictions of models such as the CAPM (Roll, 1977), we follow the guidelines of Seiler (2004) that AR's are defined as anything earned above the market return each day so that the expected return of a stock is assumed to be that earned by the market (Seiler, 2004: 220). This market adjusted AR approach is in line with Brown and Warner (1980) so that AR's are the excess stock return adjusted for the market over the sample period (Buchheim *et al.*, 2001: 22). With this in mind, the normal returns of the stock (R_i) must have the normal market return (R_m) deducted in order to generate the AR on each of the five day's as follows:

$$AR_i = R_i - R_m$$

Where $R_m = \ln\left(\frac{P_t}{P_{t-1}}\right)$. R_m is the normal market return calculated using the daily price of the FTSE Allshare over the sample period. The AR's are summated to give the cumulative AR (CAR) as follows:

$$CAR_i = \sum_{i=0}^{n} AR_i$$

Short-Run univariate analysis will involve the above process for each portfolio of M&A deals. Their characteristics will be analysed in terms of the descriptive statistics based on the portfolio CARs before we compute the portfolio t-value, and following Seiler (2004), the T-statistics are computed using the formula:

$$t = \frac{AR_T}{\sigma(AR_T)/\sqrt{n}}$$

Where AR_T refers to the sample mean, and $\sigma(AR_T)$ is the cross-sectional sample standard deviation for the sample of n firms.

4.2.2.2. Long-Term Analysis

In assessing acquirer long-run performance, Fama (1998) claims that different methodological approaches produce different results for long-run AR's so that testing in effect becomes a one over the choice of econometric model rather than a direct test of the study at hand. He further stresses that the assessment of various events with different models is noted often to eradicate the existence of an anomaly. As a consequence, choosing the correct model is therefore imperative.

We employ the BHAR approach of Buchheim *et al* (2001: 28), which measures the difference between the compounded actual return and the compound predicted return, and it is calculated as follows:

$$BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$$

where R_{it} and R_{mt} are the arithmetic returns including dividends on security i and the FTSE Allshare value-weighted index respectively at time t. For statistical significance, the conventional t-statistic is employed as outlined above. The results are reported for a thirty-six month holding period but we also compute twelve- and twenty-four month BHARs which serve to confirm our results.

The BHAR approach itself is well-used within recent literature and is the advocated method for long-term return analysis proposed by Lyon et al. (1999). They indicate that it provides an accurate measure of the AR's experienced by an investor. However, Fama (1998) argues that long-run BHARs suffer from compounding expected-return's and their associated problems from short-run analysis. Furthermore, BHARs can produce a statistically significant result even when none is present due to the effect of short-run movements (Buchheim *et al.*, 2001: 28). The possible positive-skewness problem can yield potentially misleading results and thus may cast doubt over the efficiency of the output generated from statistical analysis.

Therefore, we conduct the robust check for our results through calculation of a Bootstrapped T-Statistic also. This statistical method has gained prominence within the literature as research began to criticise the potential skewed-distribution problem of the BHAR approach (Barber and Lyon, 1997). BHARs do accurately reflect the effect of a particular corporate event upon the investor and their holdings (Buchheim *et al.*, 2001: 28) and it is for this reason that they are utilized for assessing the robustness of the long-run performance of UK acquirers.

In order to ensure the reliability of the results produced, robustness checks for the short and long-run are also conducted. The short-run window has been shortened from five-days to three-days to further assess the impact the M&A announcement has upon the gains created. The 5-day CARs results are reported and we also find that three-day CARs are very similar. Finally, the long-run window has been shortened from thirty-six months to twenty-four months. We find that the results largely support our main findings although some coefficients lose their significance.

4.2.2.3. Cross-Sectional Analysis

In addition to the short-run and long-run univariate analyses, a cross-sectional analysis is conducted to examine the explanatory factors regarding the reactions of the market reflected in the acquiring firm's share prices. As criticised by Draper and Paudyal (2008), univariate analysis fails to allow for the interaction of alternative variables upon acquirer's gains, and consequently we extend our analysis to model such interactions. The five-day CARs and thirty-six month BHARs centred upon the date of announcement are investigated in the following framework:

$$(-2,+2)\ or\ (+1,+36) = \alpha + \sum_{i=1}^{N} \beta_i X_i + \varepsilon_i$$

In model (6), the constant α reflects '*everything after controlling for the effects of all the explanatory variables*' (Draper and Paudyal, 2008: 395). In this setting, we include a vector explanatory variables in X_i including our pre-issuance activity and type of security issued alongside various control factors. The leading variables include an *Issuer* dummy which takes the value of 1 if the acquirer has issued in the three-years pre-merger announcement; a *Debt Issuer* dummy which takes the value of 1 if the acquirer issued debt within three years prior to the deal announcement; and an *Equity Issuer* dummy which takes the value of 1 if the acquirer issued equity within three years prior to the deal announcement. In addition, the issuance variable is interacted with the conditions of the market. Using a detrended PE as in Bouwman, Fuller and Nain (2009)[19], there are two additional variables. *Hot (Cold) Issuer* is a binary variable that takes the value of one if the acquirer issued debt or equity securities in a hot (cold) month as defined according to Bouwman, Fuller and Nain (2009) using the top (bottom) 25% of a market detrended PE ratio.

[19] The methodological approach of Bouwman, Fuller and Nain (2009) for a detrended P/E is explained in more detail in the previous chapter of this thesis.

We also include a series of control variables, which include: *Ln(Size)* is the logarithm of the acquirer's market value as measured one month before announcement to account for the documented size premium that indicates small firms outperform large ones; *Relative Size* is calculated as the deal value divided by the market value of the acquirer, as measured one month before announcement to ensure that the acquisition can have an economic impact on the acquirer's stock price; *MTBV* is the acquirer's market to book value as measured one month before announcement to control for the value of the acquirer; *Acquirer (Target) Advisor* is a binary variable that takes the value of one if the acquirer (target) uses a financial advisor throughout the merger process to control for the existing evidence that supports better performance for acquirers (targets) that using an advisor; *Foreign Target* is a binary variable that takes the value of 1 if the target is located outside of the UK to control for the multinationalisation of the acquirer; *Competition* is a binary variable that takes the value of 1 if there was more than one offer for the target to control for a competed offer that can destroy acquirer returns; *Public Target* is a binary variable that takes the value of 1 if the target is listed on a stock exchange that controls for the greater information available for a listed company; *Cash(Stock)* is a binary variable that takes the value of 1 if the deal is financed 100% using cash(stock) to control for signalling; *Unrelated Target* is a binary variable that takes the value of 1 if the target is in a different to that of the acquirer as measured using the two-digit primary SIC code to control for the diversification discount; *Time Interval* measures the number of days between the announcement and completion dates to control for deals that take a lengthy period to reach completion; *EBITDA* is the acquirer's earnings before interest, tax, depreciation and amortization as measured twelve months before announcement to control for relative valuation multiples; *ROE* is the acquirer's return on equity as measured twelve months before announcement to measure the firms profitability; *CAPEX/TA* is the acquirer's capital expenditure as a percentage of total assets as measured twelve months before announcement to proxy for the firm's investments; *TD/TE* is the acquirer's total debt to total equity ratio as measured twelve months before announcement to control for the firm's level of gearing. The possible existence of homoscedasticity is controlled for, with the p-values reported in parentheses using robust standard errors. Statistical significance at the 1%, 5% and 10% levels are denoted ***, ** and * respectively.

4.2.3. Summary Statistics

Table 32 reports the summary statistics of the final sample. The summary statistics in Table 32 show that those which issue debt earn 0.97% on merger announcement but lose only -8.58% over the three-year's post-merger. This provides a first indication that debt issuers may create better long-term value for shareholders.

The Total Debt to Total Equity ratio indicates that one month before merger announcement, debt issuers have the highest proportion of debt relative to equity in their capital structure as expected. When looking at the change in this ratio over the twelve months prior to deal announcement, debt issuers see the smallest increase in this figure. Rather, the highest increase is experienced in the Equity Issuer sample which sees the ratio increase over the twelve months by 24.04. As expected the Debt Issuer sample also has the highest mean Total Debt to Total Capital as measured one-month prior to merger announcement, but the biggest increase comes from the Non-Issuer sample. This could be as a result of restructuring programs.

The EPS one month prior to deal announcement is highest for those firms that issue equity which would be expected given the nature of equity issuance, but we can see that the change in EPS over the twelve months pre-merger announcement is -0.35. Our classification looks at acquirers which issue within three-years before the merger announcement and so there should be a decline in this figure expected as the information has already entered the market regarding overvaluation prior to the merger itself.

Debt Issuers are shown to have the highest total assets and this is again in line with the literature regarding the borrowing capacity of firms. Those firms that have a higher level of total assets arguably have more collateral with which to pay back the debt. Therefore the Debt Issuers sample is in line with this literature, holding the largest amount of total assets. The Debt Issuers sample also sees the largest increase in total assets in the twelve months prior to the deal announcement which could be on the back of increased investment of the firm.

We can see examining the method of payment that of the 1,802 deals financed 100% with cash, 723 raise cash via issuing debt or equity. Of those that do issue, 86% raise cash via equity issuance. For those that use equity financing, 62% do not issue before their merger announcement. Of those that do issue, only 79 issue equity. This indicates that for firms which wish to raise cash, if they do so via equity, many will opt not to use equity as their financing method at a later date.

Table 32 shows that there are over twice as many deals involving UK targets relative to Non-UK targets with those firms with Non-Issuers being involved in the largest number of transactions involving Foreign Targets. The deal value for Debt-Issuers is the highest and these firms also correspondingly are classified as the largest firms according to the mean market value figures one month pre-merger announcement. There are no small firms which issue debt prior to the merger announcement and this could be in relation to lack of collateral for debtholders.

Because of the larger acquirer size, the relative deal size for Debt Issuers is the largest, while on average the acquirer is 8.7 times the size of the target. Interestingly, there are more acquirers classified value than glamour when issuing equity. This is a measure of misvaluation, and there is no marked difference between the MTBV of equity issuers relative to non-equity issuers at the time of announcement. However, it must be noted that these firms issue equity *before* the merger announcement and thus the market has already had time before the announcement of the merger to correct any misvaluation thus we should not see a marked difference by that time assuming that markets are efficient and correct this new information at the time of issuance.

More acquirers tend to be conducting diversified transactions, particularly in the Debt Issuers sample. Around one-quarter of the debt issuers sample hires an advisor in the merger process while 29% of the targets of Debt Issuers hire an advisor. This is the largest percentage across all sub-samples.

Firms that issue are shown in Table 32 to largely use the proceeds to acquire an unlisted firm. Of the 320 acquisitions of listed firms, 203 are made by non-issuers. This could be to cater for the targets tastes. It is common that in the UK, private targets are closely-held, family firms. The preference for cash in these situations reflects the desire to exit the firm, perhaps in retirement. The acquirer is more likely to use cash in these transactions, and Table 32 shows that 43% source this cash externally.

The deal value for Non-Issuers is the smallest and thus it is unsurprising to see that it faces the strongest competition with 19 deals having competing offers. Furthermore, a larger proportion of Non-Issuers execute their deals in a hot market relative to a cold one, indicating that perhaps the Non-Issuer tries to capitalise on market conditions via a merger rather than any pre-issuance activity.

Finally, we find that at announcement, there is a stronger proportion of issuers that are undervalued rather than overvalued, particularly in the Equity Issuers sample. This gives support to the fact that the market impounds the information of potential firm misvaluation at the time of issuance rather than at merger announcement.

Overall, Table 32 indicates that Debt Issuers perform best over the long-term. They hold the highest amount of total assets and are also classified as the largest firms. On the other hand, Equity Issuers do not display any signs of misvaluation at the time of merger announcement, and only 79 finance their merger with equity indicating that the market corrects misvaluation at the time of the merger announcement. These figures give a first indication of the results and we will now progress to analyse the evidence of the univariate analysis.

4.3. Empirical Findings

4.3.1. Short-Term Analysis

Earlier in the work, we proposed that the issuance activity of a firm may have a significant impact upon its merger performance, arguably most so when the security issued is equity. This is in line with the capital structure debate regarding the signalling content of financing, which potentially reveals firm overvaluation when the firm raises capital via equity (Myers and Majluf, 1984; Jensen, 1986; Baker and Wurgler, 2002). Our first hypothesis proposed that *firms that issue equity prior to a merger will underperform those that do not.* We test this over the short-term in Table 33, which reports the univariate results for the five-day event window.

Table 33 reports that issuers earn 1.07% (0.000) at the date of announcement while non-issuers earn 1.03% (0.000) but there is no statistically significant difference between the two samples. When controlling for the method of payment (Travlos, 1987; Chang, 1998), cash-acquirers that issue earn 1.57% (0.000) significant gains while cash-acquirers that do not issue earn 1.11% (0.000) but the difference between the two samples is insignificant. However, it is in the use of stock as payment method where most information is arguably conveyed from manager to stockholder. Stock-acquirers that issue statistically significantly underperform those that do not issue by -2.39% (0.029) providing support for the underperformance of acquirers that issue equity.

When we examine the performance relative to the type of security issued, Table 33 indicates that equity issuers do not perform significantly different from those firms that do not issue equity. Equity issuers significantly gain 1.12% (0.000) while firms that do not issue equity earn 0.73% (0.013). When controlling for the method of payment, we find that equity issuers underperform for cash-acquirers and stock-acquirers, albeit statistically insignificantly. Cash-acquirers that issue equity before their merger earn 1.55% (0.000) while those that do not issue equity earn 1.72% (0.000). Furthermore, stock-acquirers that issue equity before their merger significantly lose -1.53% (0.070) whereas those that do not issue equity before but finance the merger directly using stock earn insignificant abnormal returns of 2.21% (0.427), thus neither gain nor lose. While the differences between the two payment methods and samples are statistically insignificant, there are economic differences and these are shown to indicate that stock-acquirers lose significantly when issuing equity before the deal while those which use cash significantly gain. For those firms that do not issue equity, they neither gain nor lose through using stock as their payment method.

The results in Table 33 indicate in relation to our first hypothesis that there is no statistical difference between firms that issue equity relative to those that do not. However there are economic differences. In particular, those firms that issue equity and then become a stock-acquirer significantly lose, whereas those that do not issue equity before the deal neither gain nor lose. This indicates that equity issuance is detrimental for acquirer announcement returns when the acquisition is financed with stock.

Our second hypothesis proposed that *firms which raise debt prior to conducting a merger will perform better in terms of wealth generation than those which do not due to the governance increases of debt-monitoring and firm obligations.*

Table 33 reports that in the short-term, debt issuers earn significant announcement returns of 0.97% (0.000) while those that do not issue debt gain 1.10% (0.000). The short-term results fail to show any significant difference between those firms that issue debt and those that do not. The market arguably at this stage would be unable to distinguish which deal is of a better quality at this stage. We continue in this vein to not see any significant difference between debt issuers and non-debt issuers in Table 33 and so little support in relation to our second hypothesis can be found in the short-term results. Nevertheless, cash-acquirers that issue debt significantly gain 1.67% (0.000) while cash-acquirers that do not issue debt earn 1.54% (0.000). Stock-acquirers that issue debt do not lose with insignificant 1.42% (0.468) returns while stock-acquirers that do not issue debt significantly lose -1.62% (0.065).

Overall, Table 33 provides little support for hypotheses one or two but does provide indicative evidence in particular for stock-acquirers. Those that issue equity before the merger and announce a stock-deal significantly lose, while those that issue debt before the merger and announce a stock-deal do not lose with insignificant announcement returns. The differential performance between equity issuers relative to debt issuers, as well as for those that do not issue equity relative to those that do not issue debt, does not display any statistically significant evidence however except for mixed-financed acquirers.

It should be noted that there is a minority of firms that issue both debt and equity before the merger and acquisition. Table 34 provides the results for these firms.

Table 34 indicates that 213 acquirers issued both debt and equity within the three years prior to their merger announcement, generating a statistically significant merger announcement return of 1.25% (0.002), rising to 1.63% (0.008) when the deal is financed with 100% cash. We can see from Table 34 that issuers of both debt and equity overwhelming prefer to finance their acquisition using cash solely as opposed to using only stock. In comparison to those acquirers that did not issue at all, we can see that there is no statistically significant difference in the performance of the two groups, with only a 0.22% (0.590) differential on average. This remains true across all payment method groups indicating that there is no statistical difference between issuing both equity and debt and not issuing at all.

When examining acquirer performance, we also control for known characteristics, such as firm size and firm valuation. Table 35 provides the five-day returns for acquirers stratified by size. Panel A reports that big acquirers that issue equity or debt do not statistically perform any differently to those that do not issue, although economically there is an outperformance of issuers of 0.34% (0.309). This remains true across payment method and the type of issuance. However, debt does provide a significant outperformance for cash-acquirers. Large firms that issue debt before their merger earn 1.78% (0.041) statistically more than those that do not issue at all when financing the deal solely with cash, supporting hypothesis two.

When we examine the performance of small acquirers, we find that no acquirer issues debt. This could be reflective of the higher risk involved in small-to-medium enterprises. The higher risk leads smaller firms to have difficulty when attempting to raise capital via debt at certain times. In the current economic climate, initiatives such as the Funding for Lending[20] scheme within the UK have been established to alleviate this lack of financing. The sample in this chapter reflects the risk of such firms pre-crisis and finds that none of these entities issued debt prior to their merger deal. For those that issued equity, the results indicate that there is a significant underperformance relative to those that did not issue if the merger is financed only with stock. There is a statistically lower return for small acquirers that issue relative to those that do not of 5.34% (0.017) when the deal is solely financed using stock. The decision to raise capital via equity within the three years before announcing a merger is negatively received by the market, which punishes the acquirer both economically and significantly, supporting hypothesis one.

[20] BBC News: http://www.bbc.co.uk/news/business-20579207

The existing literature notes that the smaller a firm is, the higher the announcement return for the acquirer. Moeller, Schlingemann and Stulz (2004) find supportive evidence of this known anomaly indicating that small acquirers earn on average two percentage points higher than big acquirers. Panel C shows that in the sample of acquirers that do not issue, this known anomaly is supported. Big acquirers significantly underperform small ones by 1.31% (0.000). However, this is not true of the issuer samples. In fact, for big acquirers that issue and finance their merger using solely equity, the announcement return is 7.04% (0.013) higher than that of smaller firms. This suggests that bigger firms can try to reverse this known size anomaly by issuing to the market before the decision to acquire using equity.

Big acquirers that issue both equity and debt in the three years before the merger announcement are also shown to significantly outperform non-issuers in Table 36. Big acquirers that issue both debt and equity earn 1.37% (0.010) more than non-issuers at the announcement date. This economic and statistical outperformance is also true when the payment method is mixed but does not hold for sole cash or sole stock payments. This once again reinforces the announcement benefit for big acquirers of announcing a merger after capital structure changes have been conducted.

In addition to the size effect, the prevailing evidence has also highlighted that the valuation of the acquirer can have a significant impact upon the performance of the firm during a merger. Shleifer and Vishny (2003), Rhodes-Kropf and Viswanathan (2004), and Rau and Vermaelen (1998) have all indicated that importance of firm-specific misvaluation in merger activity and firm performance. Thus, we stratify our sample by the valuation of the acquirer in Table 37.

Table 37 reports the acquirer announcement returns stratified according to the valuation of the acquirer. Panel A reports the results for glamour acquirers. The results indicate that on average, glamour issuers economically underperform across every category in comparison to glamour non-issuers indicating that those firms which are highly valued and announce an acquisition would be best placed to not have issued in the three years prior to the announcement of the deal. In fact, those acquirers which do not issue equity but finance their acquisition with solely stock, earn returns of 2.87% (0.185), 5.77% (0.031) higher than those which do issue equity and then proceed to announce a stock-financed transaction, supporting hypothesis one.

When we examine the performance of value acquirers, the results in Panel B indicate that value acquirers largely perform better when they have issued prior to the announcement of their deal, albeit only economically significant. Value acquirers that issue earn statistically significant returns of 1.06% (0.000) while those value acquirers that do not issue underperform by 0.21% (0.570) with returns of 0.85%

(0.000). The results show little support for hypothesis one in terms of equity issuance. There is no statistically significant underperformance of value acquirers that issue relative to those which do not, other than for the mixed-financing sample, which actually shows an outperformance of equity issuers that acquire of 1.35% (0.034). The level of equity used relative to cash may have an impact on this outperformance and so no real evidence in favour or against hypothesis one can be reliably gauged from this result. In terms of hypothesis two, Panel B of Table 37 shows marginal support in terms of an economically and statistically significant better announcement return for debt issuers that acquire using stock as payment, relative to those which acquire using stock but do not issue debt, of 4.76% (0.081).

Finally Panel C of Table 37 shows the differential performance of acquirers when stratified by pre-merger valuation. The results indicate that there is no meaningful significant difference statistically between the performance of glamour acquirers relative to value ones in the short-run. However, the existing literature does note that there is an outperformance of value firms relative to glamour ones over the long-term (Rau and Vermaelen, 1998) and so we may see that a difference emerges in the long-term period.

Table 38 reports the results for equity and debt issuers stratified according to the valuation of the acquirer. Panel A shows that there are no significant announcement returns for glamour acquirers that issue both equity and debt before the deal, while Panel B shows that value acquirers can gain marginally significant returns of 1.38% (0.073) after issuing both debt and equity securities. Mostly however, there is so statistical difference between glamour and value acquirers as shown in Panel C, while Panel's A and B display statistically significant results only for non-issuers.

The results when stratified according to acquirer size and value do not markedly change except for the loss of statistical significance to different coefficients. There remains to be little support for the first and second hypotheses in the short-term, except for large firms. Large firms seemingly support hypothesis two in terms of significantly outperforming their cash-acquirer counterparts that do not issue debt before the transaction is announced. To robustly analyse these findings, we also conduct additional analysis by shortening the event window to three-days instead of five. Again, the results remain qualitatively unchanged and thus we report only the tables for the three-day returns at the end of this chapter in the robustness checks available in Tables 47 to 60.

4.3.2. Long-Term Analysis

The short-term results indicated little support for our first and second hypotheses. There was no statistical difference between issuers and non-issuers for either the full sample or for those separated according to the type of security issued, i.e. debt or equity. We now focus upon the long-run performance. It is only in the long run that the market can efficiently assess the value of the deal in relation to the ability of the acquirer to successful extract synergy from the transaction. Table 39 reports the results of the long-term analysis.

Table 39 reports the long-term results for acquirers that issue relative to those which do not, stratified according to the type of security issued. Issuers are shown on average to lose 24% (0.000) from their acquisition over the long-term, while non-issuers lose 23.81% (0.000). Given the proximity of the figures to one another, there is an insignificant difference.

When we examine the performance of acquirers that acquire using stock however, those that have issued before their merger lost 63.64% (0.000), some 25.45% (0.019) lower than the performance of acquirers that did not issue, strongly supporting hypothesis one. When we examine the type of security issued, we find that this figure is driven by firms that have issued equity before the merger deal, rather than debt. There is a 64.05% (0.000) loss for acquirers that have issued equity before the merger and then proceeded to finance their deal solely via equity. This indicates that the market severely corrects the stock price of the acquirer that effectively issues equity twice (i.e. before the merger and during it), and thus it may be recommended for managers that perceive their stock price to be overvalued for them to capitalise upon it at one point in time – during the merger itself.

In relation to hypothesis two, the results strongly support the proposition that issuing debt increases firm performance. Those that issue debt and acquire lose 8.58% (0.003), significantly higher than the performance of acquirers that do not issue debt, who lose 28.23% (0.000). The significant outperformance of acquirers that issue debt relative to those which do not of 19.65% (0.000) supports that trail of thought from the existing literature that adding debt to the capital structured improves the agency costs of the organisation. It is certainly apparent that while acquirers do still lose out over the long-term, they do so to a significantly lower degree supporting the issuance of debt in terms of creating shareholder value, indeed via a reduction of long-term merger losses. When the motive for merging can sometimes not be profit-driven (i.e. competitive advantage prospects), this can be a significant finding.

When we examine the performance of debt issuers relative to the payment method of the transaction, the results indicate that cash acquirers that have issued debt to not actually lose – they have insignificant long-term losses of 0.87% (0.848) - while those that do not issue debt but complete a cash-acquisition significantly lose 14.26% (0.000). This is a statistically significant outperformance of 13.36% (0.021). This again reinforces the use of debt as a powerful tool for improving the investment projects of the firm. This significant outperformance of debt issuers relative to non-debt issuers in acquisitions remains true for mixed-financed deals. While stock-acquirers that issue debt do have economically lower losses that those stock-acquirers that do not issue debt, the difference is statistically insignificant. However, overall, the results of Table 39 do support both hypothesis one and two over the long-term period.

The performance of those firms that issue both debt and equity before the merger transaction is provided in Table 40. While there was no significant difference between the performance of equity and debt issuers relative to non-issuers in acquirer announcement returns in the short-run, Table 40 indicates that there is a significant difference in the long-term. Those firms that issue both types of securities significantly outperform those that do not issue at all with 22.03% (0.000) higher long-term acquiring returns. This remains true for cash-acquirer and for mixed-acquirers, with a significant outperformance of 19.11% (0.013) and 22.27% (0.000) respectively. Indeed while stock-acquirers that issue both debt and equity do not significantly outperform those stock-acquirers that do not issue, they do not lose either while the latter party significantly do with losses of 38.20% (0.000), again reinforcing the benefit that issuance before a merger can generate value for shareholders via a significant reduction in long-term acquisition losses.

The short-term results indicated that the size of the acquirer had only a marginal impact in supporting hypothesis two when the firm in question is large but overall, there was little impact of issuing before an acquisition relative to not issuing, in terms of the announcement return earned. We now stratify our long-term results by size in Table 41 to ascertain whether firm size affects firm performance for our sample.

Table 41 reports that overall, large acquirers that issue statistically earn 6.49% (0.061) more than large acquirers that do not issue in Panel A. While long-term losses are experienced significantly by both samples (i.e. issuing acquirers and non-issuing acquirers), these are significantly lower for the sample of issuing acquirers. When we examine the performance of big firms over the long-term stratified according to the payment method, the results indicate that cash-acquirers that issue statistically have significant losses of 12.33% (0.002) while cash-acquirers that do not issue statistically have significant losses 20.86% (0.000). Although the difference is not statistically significant, there is an economic difference in the performance with statistically significant lower losses for issuing acquirers.

Examining hypothesis one, there is no support for equity issuance destroying merger value in terms of big acquirers in Panel A but Panel B does show support emanating from small acquirers. Small firms are shown to only issue equity and this leads to a significant underperformance for acquirers of 17.07% (0.004). While big acquirers neither support nor reject hypothesis one, small acquirers on average, support the notion that issuing equity before the merger destroys corporate value with significantly lower losses for acquirers long-term.

Hypothesis two continues to be supported in Panel A by big acquirers. Those acquirers that have issued debt before the deal statistically outperform those that do not issue by 15.37% (0.004), rising to 23.01% (0.006) if the deal is cash-financed. Because small firms do not issue debt in our sample, we cannot make any inference regarding the impact of debt issuance for small firms over the long-term period. We do find support for hypothesis two from the performance of big firms while Panel C shows that big firms on average significantly outperform smaller ones. This contradicts the literature that shows that small firms outperform (Moeller, Schlingemann and Stulz, 2004). In our sample, we find that big firms that issue significantly outperform those that are small in terms of long-run acquisition returns by 23.89% (0.000). It is worth noting that big firms that do not issue significantly underperform when paying with cash by 16.71% (0.044) supporting the evidence of the previous literature and highlighting the importance of the consideration of the firm's pre-merger activities in terms of long-run wealth effects.

Examining the performance of big acquirers that issue both debt and equity[21] against reinforces the benefit of issuance in terms of the reduction of corporate losses from acquisitions over the long-term as well as the short, with the results presented in Table 42. Big acquirers significantly perform better by reducing losses some 19.31% (0.000) by issuing before the merger both debt and equity. This holds across cash-financing and mixed-payment transactions as well, with an outperformance of 18.43% (0.013) and 20.71% (0.001) respectively.

The existing literature has also noted the importance of the acquirer's pre-merger valuation, in terms of long-run post-merger performance. Pre-merger valuation was examined in our first empirical chapter regarding whether market timing can generate significant wealth gains. We take note of the evidence of Shleifer and Vishny (2003), Rhodes-Kropf and Viswanathan (2004), and Rau and Vermaelen (1998) and stratify our long-term results in the same manner as the short-term. The results are provided in Table 43.

The results do not provide any significant support for hypothesis one. While those that issue equity and then conduct a stock-acquisition do economically underperform in Panel's A and B, there fails to be statistical significance in the differential performance. Overall, glamour acquirers that issue statistically lose 11.18% (0.006) while those that do not issue only lose a mere 5.53% (0.084). However, those glamour firms that issue debt do significantly outperform those that issue equity by 23.92% (0.002) and

[21] The sample of small acquirers does not have any firms that issue both debt and equity securities.

in fact earn significant long run positive returns of 11.10% (0.077). This supports hypothesis two with debt issuing acquirers significantly outperforming those that do not issue debt by 21.49% (0.002).

Debt again proves to be beneficial over the long-term for value acquirers as well who statistically earn lower losses as compared to non-debt issuers and equity issuers in Panel B. There is a 13.81% (0.032) outperformance of debt-issuers that acquire relative to non-debt issuing acquirers. However, there fails to be support for hypothesis one for value or glamour acquirers over the long-term in Panel's A and B.

Panel C shows that glamour firms actually outperform value ones over the long-term in terms of issuing and non-issuing acquirers. The results indicate from a practical perspective that an acquiring firm will perform better long-term by issuing debt prior to their acquisition at a time in which their firm is considered overvalued, or "glamour". The lack of an information signal regarding overvaluation through the issuance of debt might be responsible for the long-term persistence in the outperformance of glamour firms relative to value ones.

Our final analysis examines the performance of debt and equity issuers over the long-term stratified by valuation, with the results presented in Table 44.

Table 44 reports that firms which issue debt and equity before their acquisition benefit most if the firm is considered "glamour" at that point in time, in terms of being considered overvalued. Panel A shows that glamour acquirers that issue debt and equity earn positive gains of 19.80% (0.037), some 24.21% (0.037) higher than value acquirers. On the whole, glamour acquirers that issued debt and equity before the merger do outperform those that did not by 25.33% (0.012) but this doesn't hold for sole cash or stock transactions.

Panel B indicates that value acquirers that issue debt and equity however do significantly outperform those that do not when conducting a cash-transaction by 27.58% (0.057). Despite this, value acquirers that do not issue debt or equity significantly underperform their glamour counterparts in Panel C by 27.73% (0.001) reinforcing the stronger benefit for the firm to acquire when they are considered glamour.

These results are not in line with the existing literature and indicate that glamour firms that issue debt and equity continue to persistently perform better than value acquirers. It could be that the issuance itself reduces the markets correction of the firm overvaluation from merger announcement. Examining the performance of the firm around issuance announcement and thereafter is beyond this work but may add to the results found here in regards to the results discussed.

4.3.3. Cross-Sectional Analysis

The univariate analysis has indicated that there is a limited effect of issuance activity for acquiring companies when analysed using a three or five-day event window. The cross-sectional analysis for the short-term is presented in Table 45.

The results indicate that there is no statistically significant relationship in the short-term between acquirer returns and the decision to issue, as measured using the *Issuer* variable. There is however a marginally significant relationship at the 10% level between acquirer returns and the *Debt Issuer* dummy, providing the initial indication over the benefits of debt financing. There is no benefit shown for the issuance of equity (*Equity Issuer*) while the market valuation has no significant effect either, as shown in models 9 and 10.

The control variables show in line with the previous literature that there is a predominantly negative relationship between the size of the company and the acquirer returns. This holds across all models as shown with the *Ln(Size)* variable, except for models 7 and 8. These two models take into consideration the valuation of the market, modelling hot conditions. It is likely therefore that the change of sign for *Ln(Size)* in these markets reflects the favourable reaction of the market in hot, optimistic times.

The *Relative Size* of the deals is shown to be positively related to the acquirer return in models 2, 4 and 6, while this reverses in models 7 and 8 once market conditions are accounted for. The positive and negative relationships found indicate that the larger the relative size of the deal, the bigger the positive or negative effect on acquirer returns. This is intuitively the case as the larger the relative size of the target to the acquirer, then the more future expected returns for the acquirer will be adjusted to reflect the inclusion of the target's operations.

In recent literature by Golubov, Petmezas and Travlos (2012), acquirers using an advisor during the M&A process see a positive effect on their financial performance. The results in models one to six support these results. There is a positive and significant effect on acquirer returns when they use an advisor. This reverses however once market conditions are accounted for. This potentially could indicate the stronger market forces at play, which advisors nor acquirers can anticipate effectively. However, there is no effect on acquirer returns when the target uses an advisor and so when targets use an advisor, this does detract from acquirer returns.

As in Travlos (1987) there is a statistically negative effect for acquirers of public targets, as well as positive returns for those paying using cash. This reflects the information asymmetry and supports the signalling hypothesis.

Of the accounting control variables used, there is a significantly negative relationship between capital expenditure and acquirer returns. Capital expenditure is sometimes used as a proxy for investment and so this negative relationship potentially reflects the drawdown of capital used to pay for the upcoming transaction.

Moving our discussions to the long-term in Table 46, the cross-sectional analysis shows that while the *Issuer* variable remains insignificant in models one and two, the *Debt Issuer* becomes strongly positively significant at the 1% level in models three and four. Moreover, while hot conditions have no impact as shown in models seven and eight, models nine and ten display a statistically significant positive relationship between acquirer returns and *Cold Issuer*. These results reinforce the long-term univariate findings over the positive effect for acquirer returns after issuing debt, while also indicating the findings of the previous chapter in regards to the enhanced quality of mergers that are untaken in cold market periods.

The size of the acquirer (*Ln(Size)*) and the *Relative Size* variables also display a significant effect on acquirer earnings. While the size of the acquirer is positively related when modelled without accounting controls, this is reversed to a negative effect once the accounting conditions of the company are controlled for. On the other hand, relative size remains positively and statistically related to acquirer returns across models one to nine. This supports Asquith, Bruner and Mullins (1983) reinforcing that the size of the target has a significant impact on acquirer returns.

In the short-term cross-sectional analysis, the valuation of the company (*MTBV*) had no significant effect on acquirer returns. This reverses in the long-term cross-sectional in Table 46, where the valuation of the acquirer is negatively related to acquirer returns. This supports the findings of the previous chapter, with high-MTBV firms underperforming long-term.

While in the short-term, acquirers benefitted positively from employing a financial advisor, this is reversed long-term. Acquirers with an advisor have a significantly negative performance, but surprisingly those that acquire targets who use an advisor have a significantly better performance. It could be the case that targets with an advisor negotiate a better price and long-term vision that those without an advisor.

Acquiring a foreign target is shown to be marginally related to acquirer returns at the 10% level in models two, four, six, eight and ten, but *Competition* and *Public Target* are unrelated. *Cash* continues to have a significant effect long-term across all models, while there is a consistently negative effect across all models when a target located in an industry unrelated to that of the acquirer is purchased. Finally, all accounting control variables have a statistical effect on acquirer returns reflecting the change in operations evoked by the acquisition itself.

Overall, the cross-sectional analyses reinforce the positive effect of debt issuance on long-term returns. The results are robustly checked using a three-day short-term window and a long-term twenty-four month holding period. For brevity, the robustness checks are not reported but are available in the robustness Tables 47-60 at the end of this chapter for perusal.

4.4. Conclusion

4.4.1. Discussion of Results

This chapter has built upon the first empirical chapter which solely examined the post-merger performance of acquirers invalidating the market-timing hypothesis in the UK market, to investigate how the pre-merger issuance activity of the acquirer can have an impact on the financial performance of the acquisition both in the short and long-term, stratifying the results by firm size and firm value.

The existing literature highlighted the importance of the issuance of debt and equity securities to firm value in terms of both the signal conveyed to the market and the monitoring role that debt can exert over managerial decision-making. Specifically, we examine the performance of acquirers that issue prior to a merger versus those which do not focussing upon two key hypotheses. The first hypothesis takes heed of the existing evidence in relation to the conveyance of information via managerial decision-making and stated that firms which issue equity in the thirty-six months before the merger announcement will underperform those which do not.

The empirical investigations have shown that the issuance of equity does not exert any significant effect in the short-term period in the full sample. Those firms that issued equity or debt and subsequently conduct a stock-financed merger and acquisition significantly underperform by 2.39% (0.029) those stock-acquirers that do not issue. However, when we stratified the results according to the type of security issued, there failed to be any support for hypothesis one. The announcement performance of equity issuers was insignificantly different to the performance of non-equity issuers. We further examined whether size is an explanatory factor and did find support for hypothesis one in the sample of small acquirers, in which equity issuers earn 34% (0.017) less than non-equity issuers at the merger announcement. Furthermore, when we stratify for the valuation of the firm, we find that glamour acquirers also offer support for hypothesis one with those stock-acquirers that have issued equity earning 5.77% (0.031) less than those stock-acquirers in the glamour sample that did not issue equity. When we move our examination of hypothesis one to the long-term, we found stronger support in Table 9, where equity issuers earn 10.77% (0.012) less from announcement than non-equity issuers. This support continued in the small firm sample but did not continue in the glamour sample. Together, these results from the short and long-term do suggest that the pre-merger issuance activity of the acquirer is important in assessing the long-term financial effects for shareholders. Given the statistical and economic significance of the underperformance of acquirers that issue equity before their merger relative to those that do not, it is recommended that firms should not seek to raise capital via equity in the three-years prior to a merger announcement.

The second hypothesis of this chapter assessed the performance of acquirers that issue debt pre-merger. It stated that firms that raise debt prior to undertaking a merger should perform better because of the governing role that debt can play in monitoring the actions of managers. The existing literature (Doukas et al., 2010; Jensen and Smith, 1985) has examined the issuance of debt itself but no study to date has examined the issuance of debt and its influence on subsequent investment decisions. This chapter aims to offer preliminary steps in filling this void by focussing upon the merger decision, and examines in the second hypothesis whether or not the decision to acquire improves on the back of increased debt within the firm's capital structure.

The empirical investigations supported the enhancement of corporate value via the issuance of debt. Those acquirers that have issued debt in the preceding period to the merger announcement are found to have a statistically significant better merger performance than those that do not, particularly long-term. Table 35, Panel A reported that in the short term, big acquirers that have issued debt earn a significantly higher return than those that have not, some 1.78% (0.041). This could be due to the fact that larger firms have higher analyst coverage, such that there may be higher investor awareness of the fact that debt has been incorporated into the capital structure of these firms hence a faster positive market reaction to the subsequent managerial investment decisions (Bhushan, 1989; Rajan and Servaes, 1997; Barth et al, 2001; Bradley et al., 2003; Fortin and Roth, 2007). We also find that value acquirers that have issued debt also experience a statistically significant better market announcement 4.76% (0.081) than those who have not, when financing their merger using stock.

When we examine the long-term results, it is in Table 39 that we find strongest support. On average, acquirers that have issued debt earn returns 19.65% (0.000) higher than those that have not issued debt – in actuality, this is a statistically lower loss for debt issuers of only 8.58% (0.003) as compared to non-debt issuers which lose 28.23% (0.000). This outperformance of debt issuers in long-term merger performance remains true for cash-acquirers and mixed-financing acquirers. The acquirers also statistically outperform those that have issued equity as well, with debt-issuers losing 16.67% (0.000) less than equity issuing acquirers.

Support for the benefits of issuing debt remain constant when the sample is stratified by size and by valuation. Big acquirers that issue debt have a 15.37% (0.004) lower loss than those that do not in Table 41, Panel A while glamour and value acquirers in Table 43, Panels A and B respectively also show significant support for hypothesis two. Glamour acquirers that issue debt actually experience positive long-term gains of 11.10% (0.002), 21.49% (0.002) higher than glamour acquirers that do not issue debt, while value debt-issuing acquirers have losses that are 13.81% (0.032) better than non-issuing value acquirers.

Overall this empirical chapter has shown explicit support for the motivation to examine deeper the pre-merger financing activity of the acquirer. It has been found that it is particularly beneficial for acquirers and their respective shareholders for the firm to have issued debt in the preceding merger period. While the results do show that firms that have issued equity do underperform in the long-term period, there are significant benefits for those that issue debt with lower losses or indeed in some cases positive capital gains. Indeed, the summary statistics do indicate that acquirers significantly increase their debt holdings in the twelve months prior to initiating a merger. For those wishing to aid improvement in the long-term performance of acquirers, increasing the debt holding of the firm does indeed appear to be one factor that can improve the investment decisions made.

4.4.2. Further Research Opportunities

While this chapter does contribute to the existing literature by uniting the examinations of issuance activity with the investment decision, there lie many further opportunities. Primarily, this chapter focuses, inline with the broader heart of this thesis, upon the merger decision itself and the value effects for shareholders. There lies an extensive avenue for developing this chapter further. Firstly, the issuance decision itself can be examined in conjunction with the merger decision. It was beyond the possibility of this study due to the limited information set of the issuance sample to study this deeper. A clear opportunity would be to examine the amount of the proceeds and the subsequent value of the merger in terms of whether or not the cash raised is used specifically to conduct a cash merger. Loosely, it could be argued that if the amount of cash raised for example via equity is sufficiently close to the value of the deal conducted, then the high level of cash mergers in the UK could be, in actuality, masked equity-deals. This would help explain where the cash emanates from in the UK merger market deeper. A limitation at present is that the issuance activity can often be undertaken by the bank – that is, the bank issues corporate debt and is listed as the issuer on the SDC database, but in effect the trail would lead us to discover that this corporate debt is held by a corporate client of the institution so it could be that the firms in the non-issuance sample are in fact issuers – in this manner, we cannot be truly certain that they are not due to the limitation of the data trail.

Another key opportunity lies in the addition of the media to this chapter. Including the sentiment of the media surrounding the issuance announcement and subsequent merger announcement could be an additional interesting opportunity for further research. Questions to focus upon for example could centre more upon the causality of the merger decision as a result of the issuance one – i.e. is capital raised to time the market (measured using media sentiment) such that does the merger occur because of the raising of extra capital, or is the capital raised to finance the merger irrespective of market sentiment? It was suggested that big acquirers and glamour ones benefit most via issuing debt through the fact that the media are more aware of these firms given their larger analyst following. Further empirical examinations could help quantify this further.

This empirical chapter has contributed to the existing field by producing evidence to suggest that the pre-merger issuance activity of the firm does have an impact in its post-merger performance, highlighting beneficial effects when capital is raised via debt securities. These additional offerings can be explored to help further fill this void in the existing literature so as to construct a useful working framework for improving acquirer financial performance post-merger.

Table 31: Type of Security Issued under Equity or Debt

This table reports the type of security that is issued by the acquirers in our merger sample. The equity (debt) issuance sample contains those acquirers which issued equity (debt) securities up to a maximum of three-years before the merger announcement.

Equity Issuance	Debt Issuance
American Depository Receipts	Asset Backed Bonds
American Depository Shares	Bonds
Class A Shares	Convertible Bonds
Common Shares	Convertible Unsecured Loan Stock
Cumulative Preferred Stock	Fixed/Floating Sub Bond
Convertible Preferred Shares	Floating Rate Notes
Debenture Stock	Floating Rate Guaranteed Medium-Term Notes
Equity Secured Units	Fixed/Straight Bond
German Depository Receipts	Global Bonds
Ordinary Part Certificates	Global Notes
Ordinary Unit	Guaranteed Medium-Term Notes
Ordinary/Common Shares	Guaranteed Senior Notes
Ordinary Shares	Guaranteed Bonds
Preference Shares	Guaranteed Notes
	Loan Stock
	Medium-Term Floating Notes
	Medium-Term Notes
	Mortgage Backed Bonds
	Notes
	Senior Unsecured Convertible
	Senior Notes
	Senior Secured Notes
	Senior Unsecured Notes
	Units

Table 32: Chapter Four - Summary Statistics

This table reports the summary statistics for the final sample over the sample period 01-01-1990 until 31-12-2009. The Issuer sample contains deals in which the acquirer issued either debt or equity securities, as classified in Table 31, in the three- years prior to the merger announcement. The Equity Issuer sample contains deals in which the acquirer issued equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Debt Issuer sample contains deals in which the acquirer issued debt securities, as classified in Table 31, in the three-years prior to the merger announcement. The Non-Issuer sample contains deals in which the acquirer did not issue either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The variables reported are calculated as follows: Mean 5-Day CAR reports the mean acquirer's cumulative abnormal on a (-2,+2) window using the formula $CAR_i = \sum_{i=0}^{n} AR_i$; Mean 36 Month BHAR reports the mean acquirer's buy-and-hold abnormal return over a (+1,+36) event window using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$; Total Debt to Total Equity reports the acquirer's Total Debt to Total Equity ratio one month before merger announcement; Change in Total Debt to Total Equity reports the change in the acquirer's Total Debt to Total Equity from one month before merger announcement minus twelve months before merger announcement; Total Debt to Total Capital reports the acquirer's Total Debt to Total Capital ratio one month before merger announcement; Change in Total Debt to Total Capital reports the change in the acquirer's Total Debt to Total Capital from one month before merger announcement minus twelve months before merger announcement; EPS reports the acquirer's earnings per share one month before the merger announcement; Change in EPS reports the acquirer's change in earnings per share from one month before merger announcement minus twelve months before merger announcement; Total Assets reports the acquirer's total assets one month before merger announcement; Change in Total Assets reports the change in the acquirer's total assets from one month before merger announcement minus twelve months before merger announcement; Cash (Stock) reports the number of deals financed in each sample with 100% cash (stock); Mixed reports the number of deals financed using a mixture of cash and stock; Domestic (Foreign) Target reports the number of deals where the target was a UK (Non-UK) firm; Deal Value reports the mean value of the deal measured in millions at the announcement date; MV reports the mean acquirer market value one month before the merger announcement; Small (Big) reports the number of deals where the acquirer was classified as small (big), as measured as those firms in the lowest (highest) third of acquirers once ranked by their market value one month prior to the deal announcement; Relative Size is the mean of the calculation of deal value to acquirer market value one month prior to the deal announcement; MTBV reports the mean acquirer market-to-book value; Value (Glamour) reports the number of deals where the acquirer was classified as value (glamour), as measured as those firms in the lowest (highest) third of acquirers once ranked by their market-to-book value one month prior to the deal announcement; Unrelated (Related) Target reports the number of deals where the acquirer was in a different (the same) industry to (as) the target as measured using the first two-digits of the Primary SIC codes; Acquirer Advisor (Target Advisor) reports the number of deals where the acquirer (target) hired an advisor; Public (Private) Target reports the number of deals where the target was a listed (unlisted) firm; Subsidiary Target reports the number of deals where the target was a subsidiary firm; Competed Deal reports the number of deals in which the target received a competing offer; Hot (Cold) Market reports the number of deals announced in a hot (cold) market as measured using the highest (lowest) months as ranked by market price-to-earnings figures under the methodology of Bouwman, Fuller and Nain (2009); and finally, Overvalued (Undervalued) acquirer reports the number of deals where the acquirer's stock was classified as overvalued (undervalued) using a twenty-four month window (-12,+12) surrounding merger announcement, with the top (bottom) 30% classified as overvalued (undervalued).

	Full Sample	Issuer	Equity Issuer	Debt Issuer	Non-Issuer
N	5,175	2,135	1,889	459	3,040
Mean 5 Day CAR	1.05%	1.07%	1.12%	0.97%	1.03%
Mean 36 Month BHAR	-23.89%	-24.00%	-25.24%	-8.58%	-23.81%
Total Debt to Total Equity (-1,0)	57.76	62.33	60.86	81.01	54.60
Change in Total Debt to Total Equity (-12,0)	16.36	21.72	24.04	3.89	12.65
Total Debt to Total Capital (-1,0)	29.80	31.51	30.76	39.20	28.62
Change in Total Debt to Total Capital (-12,0)	13.30	-2.42	-2.89	1.27	24.21
EPS (-1,0)	50.73	74.12	81.70	22.39	35.18
Change in EPS (-12,0)	2.18	0.69	-0.35	1.28	1.98
Total Assets (-1,0)	386,273	424,425	326,027	1,182,581	359,861
Change in Total Assets	52,127	63,330	60,519	119,718	44,388
Cash	1,802	723	620	196	1,079
Stock	222	85	79	10	137
Mixed	3,151	1,327	1,190	253	1,824
Domestic Target	3,498	1,410	1,295	238	2,088
Foreign Target	1677	725	594	221	952
Deal Value	30,359	56,629	63,987	253,149	11,910
MV (-1,0)	310.09	337.47	270.35	841.65	290.86
Small	1,205	459	459	0	746
Big	1,197	550	374	328	647
Relative Size	87.25	98.99	111.86	140.72	79.01
MTBV (-1,0)	2.49	2.50	2.49	2.54	2.49
Value	1,302	556	485	126	746
Glamour	1,153	531	472	121	622
Unrelated Target	3,860	1,481	1,273	369	2,379
Related Target	1,315	654	616	90	661
Acquirer Advisor	1,549	595	540	119	954
Target Advisor	1,190	508	444	135	682
Public Target	320	117	103	30	203
Private Target	3,065	1,331	1,194	246	1,734
Subsidiary Target	1,790	687	592	183	1,103
Competed Deal	26	7	7	2	19
Hot Market	1,696	670	583	165	1,026
Cold Market	1,024	451	397	96	573
Overvalued Acquirer	1,838	697	587	199	1,141
Undervalued Acquirer	2,276	826	705	231	1,450

Table 33: Short Term Five-Day CAR

This table reports the acquirer short-term five-day cumulative abnormal return for the final sample over the sample period 01-01-1990 until 31-12-2009. The cumulative abnormal return is calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms which did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

	Issuer				Equity Issuer				Debt Issuer				Differentials			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Mean	1.07%***	1.57%***	-1.26%	0.95%***	1.12%***	1.55%***	-1.53%*	1.07%***	0.97%***	1.67%***	1.42%	-0.41%	0.15%	-0.12%	-2.95%	0.67%*
P-Value	(0.000)	(0.000)	(0.117)	(0.000)	(0.000)	(0.000)	(0.070)	(0.000)	(0.000)	(0.000)	(0.468)	(0.201)	(0.608)	(0.789)	(0.175)	(0.083)
N	2135	723	85	1327	1889	620	79	1190	459	196	10	253				
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt				Differentials			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Mean	1.03%***	1.11%***	1.13%	0.98%***	0.73%**	1.72%***	2.21%	-0.08%	1.10%***	1.54%***	-1.62%*	1.08%***	-0.38%	0.18%	3.83%	-1.17%***
P-Value	(0.000)	(0.000)	(0.127)	(0.000)	(0.013)	(0.000)	(0.427)	(0.822)	(0.000)	(0.000)	(0.065)	(0.000)	(0.271)	(0.739)	(0.204)	(0.009)
N	3040	1079	137	1824	246	103	6	137	1676	527	75	1074				
	Differentials				Differentials				Differentials							
Diff	0.04%	0.46%	-2.39%**	-0.02%	0.39%	-0.17%	-3.73%	1.16%***	-0.13%	0.14%	3.04%	-0.68%*				
P-Value	(0.820)	(0.123)	(0.029)	(0.926)	(0.239)	(0.750)	(0.213)	(0.008)	(0.658)	(0.777)	(0.164)	(0.087)				

Table 34: Five-Day Returns for Equity and Debt Issuers

This table reports the acquirer short-term five-day cumulative abnormal return for the final sample for those that issued equity and debt, over the sample period 01-01-1990 until 31-12-2009. The cumulative abnormal return is calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms which did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

	All	Cash	Stock	Mixed
		Panel A: Equity and Debt Issuer		
Mean	1.25%***	1.63%***	0.24%	0.98%*
P-Value	(0.002)	(0.008)	(0.942)	(0.064)
N	213	93	4	116
		Panel B: Non-Issuer		
Mean	1.03%***	1.11%***	1.13%	0.98%***
P-Value	(0.000)	(0.000)	(0.127)	(0.000)
N	3040	1079	137	1824
		Panel C: Differentials		
Diff	0.22%	0.52%	-0.89%	0.01%
P-Value	(0.590)	(0.409)	(0.794)	(0.987)

Table 35: Five-Day Returns by Size

This table reports the acquirer short-term five-day cumulative abnormal return for the final sample over the sample period 01-01-1990 until 31-12-2009 for those acquirers classified as big and small. The cumulative abnormal return is calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms which did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). Panel A reports the results of big acquirers, measured as the highest third of acquirers as ranked by their market value one month prior to the deal announcement while Panel B reports the results for small acquirers, measured as the lowest third of acquirers as ranked by their market value one month prior to the deal announcement. Panel C reports the differential performance between Panel A and Panel B. The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

Panel A: Big Acquirers																
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuer				Equity-Issuance				Debt-Issuance				Differentials			
Mean	0.85%***	0.96%**	2.54%	0.70%**	0.97%***	0.73%	1.99%	1.10%***	1.18%***	1.65%***	3.47%	0.77%**	-0.21%	-0.92%	-1.48%	0.33%
P-Value	(0.001)	(0.017)	(0.245)	(0.027)	(0.004)	(0.182)	(0.470)	(0.010)	(0.000)	(0.000)	(0.225)	(0.034)	(0.629)	(0.191)	(0.691)	(0.546)
N	550	222	13	315	374	151	9	214	328	136	6	186				
	Non-Issuer				Does Not Issue Equity				No-Debt Issuance				Differentials			
Mean	0.51%**	1.08%***	0.91%	0.06%	0.58%*	1.44%***	3.77%	-0.16%	0.35%	-0.13%	1.74%	0.60%	0.23%	1.58%*	2.03%	-0.75%
P-Value	(0.022)	(0.001)	(0.613)	(0.847)	(0.062)	(0.003)	(0.386)	(0.689)	(0.437)	(0.860)	(0.623)	(0.297)	(0.678)	(0.074)	(0.697)	(0.277)
N	647	271	18	358	176	71	4	101	222	86	7	129				
	Differentials															
Diff	0.34%	-0.12%	1.63%	0.64%	0.39%	-0.71%	-1.78%	1.26%**	0.83%	1.78**	1.73%	0.17%				
P-Value	(0.309)	(0.816)	(0.555)	(0.148)	(0.384)	(0.317)	(0.710)	(0.030)	(0.117)	(0.041)	(0.688)	(0.803)				

Panel B: Small Acquirers																
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuance				Equity-Issuance				Debt-Issuance				Differentials			
Mean	1.20%***	2.39%***	-4.51%**	1.16%**	1.20%***	2.39%***	-4.51%**	1.16%**	-	-	-	-	-	-	-	-
P-Value	(0.003)	(0.004)	(0.012)	(0.015)	(0.003)	(0.004)	(0.012)	(0.015)	-	-	-	-	-	-	-	-
N	459	109	20	330	459	109	20	330	-	-	-	-				
	Non-Issuance				No Equity-Issuance				No-Debt Issuance				Differentials			
Mean	1.82%***	1.74%***	0.83%	1.94%***	-	-	-	-	-	-	-	-	-	-	-	-
P-Value	(0.000)	(0.000)	(0.563)	(0.000)	-	-	-	-	-	-	-	-	-	-	-	-
N	746	218	41	487	-	-	-	-	-	-	-	-				
	Differentials															
Diff	-0.61%	0.64%	-5.34%**	-0.78%	-	-	-	-	-	-	-	-				
P-Value	(0.215)	(0.472)	(0.017)	(0.208)	-	-	-	-	-	-	-	-				

Panel C: Big - Small Acquirers												
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuance				Equity-Issuance				Debt-Issuance			
Diff	-0.36%	-1.43%	7.04%**	-0.46%	-0.23%	-1.66%*	6.50%*	-0.06%	-	-	-	-
P-Value	(0.445)	(0.112)	(0.013)	(0.415)	(0.654)	(0.088)	(0.053)	(0.925)	-	-	-	-
	Non-Issuance				No Equity-Issuance				No-Debt Issuance			
Diff	-0.0131***	-0.67%	0.07%	-0.0188***	-	-	-	-	-	-	-	-
P-Value	(0.000)	(0.185)	(0.974)	(0.000)	-	-	-	-	-	-	-	-

Table 36: Five-Day Returns for Equity and Debt Issuers by Size

This table reports the acquirer short-term five-day cumulative abnormal return for the final sample over the sample period 01-01-1990 until 31-12-2009 for those acquirers classified as big that issued both equity and debt. The cumulative abnormal return is calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. Big acquirers are measured as the highest third of acquirers as ranked by their market value one month prior to the deal announcement The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms which did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

	All	Cash	Stock	Mixed
		Panel A: Equity and Debt Issuer		
Mean	1.88%***	1.87%**	2.87%	1.86%***
P-Value	(0.000)	(0.019)	(0.541)	(0.003)
N	152	65	2	85
		Panel B: Non-Issuer		
Mean	5.10%**	1.08%***	0.91%	0.06%
P-Value	(0.022)	(0.001)	(0.613)	(0.847)
N	647	271	18	358
		Panel C: Differentials		
Diff	1.37%***	0.79%	1.96%	1.80%***
P-Value	(0.010)	(0.346)	(0.659)	(0.009)

Table 37: Five-Day Returns by Valuation

This table reports the acquirer short-term five-day cumulative abnormal return for the final sample over the sample period 01-01-1990 until 31-12-2009 for those acquirers classified as glamour and value. The cumulative abnormal return is calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms which did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). Panel A reports the results of glamour acquirers, measured as the highest third of acquirers as ranked by their market-to-book value one month prior to the deal announcement while Panel B reports the results for value acquirers, measured as the lowest third of acquirers as ranked by their market-to-book value one month prior to the deal announcement. Panel C reports the differential performance between Panel A and Panel B. The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

Panel A: Glamour Acquirers																
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuer				Equity-Issuer				Debt-Issuer				Differentials			
Mean	0.95%***	1.42%***	-1.99%	0.90%**	0.90%***	1.38%***	-2.90%*	0.90%**	1.01%**	1.60%*	2.08%	0.47%	-0.11%	-0.22%	-4.98%	0.43%
P-Value	(0.001)	(0.002)	(0.221)	(0.013)	(0.004)	(0.007)	(0.067)	(0.022)	(0.049)	(0.058)	(0.787)	(0.439)	(0.854)	(0.824)	(0.539)	(0.553)
N	531	175	22	334	472	152	20	300	121	53	3	65				
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt				Differentials			
Mean	1.38%***	1.11%***	2.57%	1.47%***	1.38%***	1.16%***	2.87%	1.42%***	1.20%***	1.19%***	0.46%	1.27%***	0.18%	-0.03%	2.41%	0.15%
P-Value	(0.000)	(0.001)	(0.258)	(0.001)	(0.000)	(0.000)	(0.185)	(0.001)	(0.000)	(0.000)	(0.759)	(0.000)	(0.619)	(0.945)	(0.357)	(0.770)
N	622	240	28	354	681	263	30	388	1032	362	47	623				
Differentials																
Diff	-0.43%	0.30%	-4.56%	-0.57%	-0.48%	0.23%	-5.77%**	-0.51%	-0.20%	0.41%	1.62%	-0.80%				
P-Value	(0.297)	(0.592)	(0.101)	(0.319)	(0.242)	(0.707)	(0.031)	(0.362)	(0.722)	(0.641)	(0.835)	(0.246)				

Panel B: Value Acquirers																
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuer				Equity Issuer				Debt Issuer				Differentials			
Mean	1.06%***	1.11%**	-1.07%	1.20***	1.07%***	0.90%*	-1.11%	1.34%***	1.15%***	1.42%***	3.17%	0.87%*	-0.07%	-0.51%	-4.28%	0.47%
P-Value	(0.000)	(0.011)	(0.334)	(0.004)	(0.002)	(0.077)	(0.332)	(0.004)	(0.005)	(0.046)	(0.208)	(0.090)	(0.889)	(0.549)	(0.106)	(0.488)
N	556	181	27	348	485	147	26	312	126	52	3	71				
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt				Differentials			
Mean	0.85%***	1.15%***	1.08%	0.65%**	0.97%**	2.04%***	0.17%	-0.02%	1.04%***	0.99%*	-1.59%	1.28%**	-0.07%	1.05%	1.76%	-1.30%*
P-Value	(0.000)	(0.001)	(0.381)	(0.034)	(0.024)	(0.007)	-	(0.970)	(0.005)	(0.068)	(0.183)	(0.011)	(0.907)	(0.244)	-	(0.053)
N	746	266	37	443	71	34	1	36	430	129	24	277				
	Differentials															
Diff	0.21%	-0.03%	-2.14%	0.55%	0.10%	-1.14%	-1.28%	1.35%**	0.11%	0.42%	4.76%*	-0.42%				
P-Value	(0.570)	(0.951)	(0.193)	(0.285)	(0.848)	(0.195)	-	(0.034)	(0.838)	(0.631)	(0.081)	(0.558)				

Panel C: Glamour - Value												
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuer				Equity Issuer				Debt Issuer			
Mean	-0.11%	0.30%	-0.93%	-0.30%	-0.18%	0.48%	-1.79%	-0.43%	-0.14%	0.18%	-1.09%	-0.39%
P-Value	(0.793)	(0.629)	(0.631)	(0.590)	(0.698)	(0.498)	(0.345)	(0.472)	(0.828)	(0.864)	(0.889)	(0.620)
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt			
Mean	0.53%	-0.04%	1.49%	0.82%	0.41%	-0.88%	2.70%	1.43%**	0.17%	0.20%	2.06%	-0.01%
P-Value	(0.155)	(0.941)	(0.559)	(0.126)	(0.416)	(0.265)	-	(0.018)	(0.695)	(0.750)	(0.281)	(0.981)

Table 38: Five-Day Returns for Equity and Debt Issuers by Valuation

This table reports the acquirer short-term five-day cumulative abnormal return for the final sample over the sample period 01-01-1990 until 31-12-2009 for those acquirers classified as glamour and value that issued both equity and debt. The cumulative abnormal return is calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. Glamour acquirers are measured as the highest third of acquirers as ranked by their market-to-book value one month prior to the deal announcement while Value acquirers are measured as the lowest third of acquirers as ranked by their market-to-book value one month prior to the deal announcement. The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms that did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). Panel A reports the results of glamour acquirers while Panel B reports the results for value acquirers. Panel C reports the differential performance between Panel A and Panel B. The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

Panel A: Glamour Acquirer				
	All	Cash	Stock	Mixed
Issues Equity and Debt				
Mean	0.64%	1.56%	-7.97%	0.01%
P-Value	(0.426)	(0.206)	-	(0.990)
N	62	30	1	31
Non-Issuer				
Mean	1.38%***	1.11%***	2.57%	1.47%***
P-Value	(0.000)	(0.001)	(0.258)	(0.001)
N	622	240	28	354
Differentials				
Diff	-0.75%	0.45%	-10.54%	-1.46%
P-Value	(0.382)	(0.721)	-	(0.201)

Panel B: Value Acquirer				
	All	Cash	Stock	Mixed
Issues Equity and Debt				
Mean	1.38%*	0.24%	4.67%	1.77%**
P-Value	(0.073)	(0.874)	(0.194)	(0.057)
N	55	18	2	35
Non-Issuer				
Mean	0.85%***	1.15%***	1.08%	0.65%**
P-Value	(0.000)	(0.001)	(0.381)	(0.034)
N	746	266	37	443
Differentials				
Diff	0.53%	-0.91%	3.59%	1.12%
P-Value	(0.602)	(0.963)	(0.190)	(0.598)

Panel C: Glamour – Value				
Issues Equity and Debt				
	All	Cash	Stock	Mixed
Diff	-0.74%	1.33%	-12.64%	-1.76%
P-Value	(0.499)	(0.491)	-	(0.203)
Does Not Issue Equity or Debt				
	All	Cash	Stock	Mixed
Diff	0.53%	-0.04%	1.49%	0.82%
P-Value	(0.155)	(0.941)	(0.560)	(0.126)

Table 39: Thirty-Six Month BHARs

This table reports the acquirer long-term thirty-six month buy-and-hold abnormal return for the final sample over the sample period 01-01-1990 until 31-12-2009. The buy-and-hold abnormal return is calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms that did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

	Issuer				Equity-Issuer				Debt-Issuer				Differentials			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Mean	-24.00%***	-10.61%***	-63.64%***	-28.76%***	-25.24%***	-11.54%***	-64.05%***	-29.81%***	-8.58%***	-0.87%	-44.39%**	-13.13%***	-16.67%***	-10.67%**	-19.66%	-16.68%***
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.003)	(0.848)	(0.043)	(0.001)	(0.000)	(0.056)	(0.363)	(0.000)
N	2135	723	85	1327	1889	620	79	1190	459	196	10	253				
	Does Not Issue				Does Not Issue Equity				Does Not Issue Debt				Differentials			
Mean	-23.81%***	-15.36%***	-38.20%***	-27.72%***	-14.47%***	-5.05%	-58.31%**	-19.63%***	-28.23%***	-14.24%***	-66.21%***	-32.44%***	13.76%***	9.19%	7.91%	12.80%**
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.383)	(0.044)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.002)	(0.176)	(0.749)	(0.026)
N	3040	1079	137	1824	246	103	6	137	1676	527	75	1074				
	Differentials				Differentials				Differentials							
Diff	-0.20%	4.75%	-25.45%**	-1.04%	-10.77%**	-6.49%	-5.74%	-10.17%*	19.65%***	13.36%**	21.82%	19.31%***				
P-Value	(0.931)	(0.217)	(0.019)	(0.721)	(0.012)	(0.326)	(0.815)	(0.072)	(0.000)	(0.021)	(0.317)	(0.000)				

Table 40: Thirty-Six Month BHARs for Equity and Debt Issuers

This table reports the acquirer long-term thirty-six month buy-and-hold abnormal return for the final sample for those that issued equity and debt, over the sample period 01-01-1990 until 31-12-2009. The buy-and-hold abnormal return is calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms which did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

	All	Cash	Stock	Mixed
		Equity and Debt Issuer		
Mean	-1.77%	3.75%	-23.51%	-5.45%
P-Value	(0.683)	(0.602)	(0.550)	(0.316)
N	213	93	4	116
		Non-Issuer		
Mean	-23.81%***	-15.36%***	-38.20%***	-27.72%***
P-Value	(0.000)	(0.000)	(0.000)	(0.000)
N	3040	1079	137	1824
		Differentials		
Diff	22.03%***	19.11%**	14.69%	22.27%***
P-Value	(0.000)	(0.013)	(0.706)	(0.000)

Table 41: Thirty-Six Month BHARs by Size

This table reports the acquirer long-term thirty-six month buy-and-hold abnormal return for the final sample over the sample period 01-01-1990 until 31-12-2009 for those acquirers classified as big and small. The buy-and-hold abnormal return is calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms which did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). Panel A reports the results of big acquirers, measured as the highest third of acquirers as ranked by their market value one month prior to the deal announcement while Panel B reports the results for small acquirers, measured as the lowest third of acquirers as ranked by their market value one month prior to the deal announcement. Panel C reports the differential performance between Panel A and Panel B. The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

Panel A: Big Acquirers																
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuer				Equity-Issuance				Debt-Issuance				Differentials			
Mean	-14.87%***	-12.33%***	-33.48%*	-15.90%***	-15.10%***	-16.10%***	-24.87%	-13.99%***	-8.67%***	-3.42%	-48.37%	-11.23%***	-6.43%	-12.68%*	23.50%	-2.76%
P-Value	(0.000)	(0.002)	(0.066)	(0.000)	(0.000)	(0.001)	(0.234)	(0.001)	(0.004)	(0.462)	(0.110)	(0.005)	(0.138)	(0.059)	(0.473)	(0.633)
N	550	222	13	315	374	151	9	214	328	136	6	186				
	Non-Issuer				Does Not Issue Equity				No-Debt Issuance				Differentials			
Mean	-21.36%***	-20.86%***	-24.31%	-21.59%***	-14.39%***	-4.32%	-52.85%	-19.94%***	-24.04%***	-26.43%***	-20.72%	-22.63%***	9.66%	22.11%**	-32.13%	2.69%
P-Value	(0.000)	(0.000)	(0.147)	(0.000)	(0.001)	(0.525)	(0.217)	(0.001)	(0.000)	(0.000)	(0.398)	(0.000)	(0.115)	(0.023)	(0.462)	(0.739)
N	647	271	18	358	176	71	4	101	222	86	7	129				
	Differentials															
Diff	6.49%*	8.53%	-9.16%	5.69%	-0.72%	-11.77%	27.98%	5.94%	15.37%***	23.01%***	-27.65%	11.40%				
P-Value	(0.061)	(0.114)	(0.694)	(0.216)	(0.892)	(0.159)	(0.505)	(0.392)	(0.004)	(0.006)	(0.431)	(0.109)				

Panel B: Small Acquirers																
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuance				Equity-Issuance				Debt-Issuance				Differentials			
Mean	-38.77%***	-34.38%***	-67.42%***	-38.48%***	-38.77%***	-34.38%***	-67.42%***	-38.48%***	-	-	-	-	-	-	-	-
P-Value	(0.000)	(0.000)	(0.003)	(0.000)	(0.000)	(0.000)	(0.003)	(0.000)	-	-	-	-	-	-	-	-
N	459	109	20	330	459	109	20	330	-	-	-	-				
	Non-Issuance				No Equity-Issuance				No-Debt Issuance				Differentials			
Mean	-21.70%***	-4.15%	-46.85%***	-27.43%***	-	-	-	-	-	-	-	-	-	-	-	-
P-Value	(0.000)	(0.576)	(0.000)	(0.000)	-	-	-	-	-	-	-	-	-	-	-	-
N	746	218	41	487	-	-	-	-	-	-	-	-				
	Differentials															
Diff	-17.07%***	-30.23%***	-20.57%	-11.05%	-	-	-	-	-	-	-	-				
P-Value	(0.004)	(0.007)	(0.370)	(0.123)	-	-	-	-	-	-	-	-				

Panel C: Big - Small Acquirers												
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuance				Equity-Issuance				Debt-Issuance			
Diff	23.89%***	22.05%**	33.94%	22.58%***	23.67%***	18.29%*	42.55%	24.49%***	-	-	-	-
P-Value	(0.000)	(0.016)	(0.193)	(0.000)	(0.000)	(0.056)	(0.134)	(0.000)	-	-	-	-
	Non-Issuance				No Equity-Issuance				No-Debt Issuance			
Diff	0.33%	-16.71%**	22.54%	5.84%	-	-	-	-	-	-	-	-
P-Value	(0.941)	(0.044)	(0.263)	(0.300)	-	-	-	-	-	-	-	-

Table 42: Thirty-Six Month BHARs for Equity and Debt Issuers by Size

This table reports the acquirer long-term thirty-six month buy-and-hold abnormal return for the final sample for those that issued equity and debt, over the sample period 01-01-1990 until 31-12-2009. The buy-and-hold abnormal return is calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. Big acquirers are measured as the highest third of acquirers as ranked by their market value one month prior to the deal announcement The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms which did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

	All	Cash	Stock	Mixed
		Panel A: Equity and Debt Issuer		
Mean	-2.05%	-2.43%	-39.40%	-0.88%
P-Value	(0.618)	(0.702)	(0.563)	(0.872)
N	152	65	2	85
		Panel B: Non-Issuer		
Mean	-21.36%***	-20.86%***	-24.31%	-21.59%***
P-Value	(0.000)	(0.000)	(0.147)	(0.000)
N	647	271	18	358
		Panel C: Differentials		
Diff	19.31%***	18.43%**	-15.08%	20.71%***
P-Value	(0.000)	(0.013)	(0.808)	(0.001)

Table 43: Thirty-Six Month BHARs by Valuation

This table reports the acquirer long-term thirty-six month buy-and-hold abnormal return for the final sample over the sample period 01-01-1990 until 31-12-2009 for those acquirers classified as glamour and value. The buy-and-hold abnormal return is calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms which did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). Panel A reports the results of glamour acquirers, measured as the highest third of acquirers as ranked by their market-to-book value one month prior to the deal announcement while Panel B reports the results for value acquirers, measured as the lowest third of acquirers as ranked by their market-to-book value one month prior to the deal announcement. Panel C reports the differential performance between Panel A and Panel B. The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

Panel A: Glamour Acquirers																
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuer				Equity-Issuer				Debt-Issuer				Differentials			
Mean	-11.18%***	-2.94%	-62.61%***	-12.10%**	-12.82%***	-4.61%	-60.04%***	-13.83%**	11.10%*	16.28%*	-38.90%	9.18%	-23.92%***	-20.89%*	-21.15%	-23.01%**
P-Value	(0.006)	(0.600)	(0.000)	(0.030)	(0.004)	(0.454)	(0.001)	(0.024)	(0.077)	(0.090)	(0.517)	(0.279)	(0.002)	(0.066)	(0.719)	(0.028)
N	531	175	22	334	472	152	20	300	121	53	3	65				
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt				Differentials			
Mean	-5.53%*	7.75%	-37.02%***	-12.05%***	-4.89%	7.78%*	-40.43%***	-10.72%**	-10.39%***	1.33%	-48.88%***	-14.29%***	5.50%	6.45%	8.44%	3.57%
P-Value	(0.084)	(0.106)	(0.002)	(0.007)	(0.105)	(0.084)	(0.000)	(0.011)	(0.000)	(0.734)	(0.000)	(0.000)	(0.175)	(0.280)	(0.526)	(0.527)
N	622	240	28	354	681	263	30	388	1032	362	47	623				
	Differentials															
Diff	-5.64%	-10.68%	-25.59%	-0.06%	-7.93%	-12.39%	-19.61%	-3.10%	21.49%***	14.95%	9.98%	23.47%**				
P-Value	(0.273)	(0.147)	(0.143)	(0.994)	(0.137)	(0.104)	(0.281)	(0.674)	(0.002)	(0.148)	(0.861)	(0.013)				

Panel B: Value Acquirers																
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuer				Equity Issuer				Debt Issuer				Differentials			
Mean	-31.16%***	-14.80%**	-72.88%***	-36.44%***	-30.90%***	-14.28%**	-73.37%***	-35.20%***	-20.48%***	-8.50%	-42.10%	-28.34%***	-10.42%*	-5.78%	-31.27%	-6.86%
P-Value	(0.000)	(0.015)	(0.000)	(0.000)	(0.000)	(0.046)	(0.001)	(0.000)	(0.000)	(0.284)	(0.244)	(0.000)	(0.092)	(0.586)	(0.373)	(0.374)
N	556	181	27	348	485	147	26	312	126	52	3	71				
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt				Differentials			
Mean	-24.29%***	-19.98%***	-44.35%***	-25.21%***	-32.93%***	-17.03%*	-59.95%	-47.19%***	-34.29%***	-17.33%**	-76.72%***	-38.51%***	1.37%	0.30%	16.77%	-8.67%
P-Value	(0.000)	(0.002)	(0.005)	(0.000)	(0.000)	(0.095)	-	(0.000)	(0.000)	(0.029)	(0.001)	(0.000)	(0.861)	(0.981)	-	(0.376)
N	746	266	37	443	71	34	1	36	430	129	24	277				
	Differentials															
Diff	-6.87%	5.18%	-28.52%	-11.23%*	2.02%	2.75%	-13.42%	11.99%	13.81%**	8.83%	34.62%	10.18%				
P-Value	(0.158)	(0.552)	(0.221)	(0.060)	(0.790)	(0.822)	-	(0.213)	(0.032)	(0.428)	(0.335)	(0.203)				

Panel C: Glamour - Value												
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuer				Equity Issuer				Debt Issuer			
Mean	19.99%***	11.86%	10.27%	24.33%***	18.09%***	9.67%	13.33%	21.37%***	31.58%***	24.79%**	3.21%	37.52%***
P-Value	(0.000)	(0.150)	(0.646)	(0.001)	(0.002)	(0.303)	(0.573)	(0.005)	(0.000)	(0.046)	(0.958)	(0.001)
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt			
Mean	18.76%***	27.73%***	7.33%	13.16%**	28.04%***	24.81%**	19.52%	36.47%***	23.91%***	18.67%**	27.85%	24.22%***
P-Value	(0.000)	(0.001)	(0.690)	(0.033)	(0.000)	(0.027)	-	(0.000)	(0.000)	(0.035)	(0.200)	(0.000)

Table 44: Thirty-Six Month BHARs for Equity and Debt Issuers by Valuation

This table reports the acquirer long-term thirty-six month buy-and-hold abnormal return for the final sample stratified by firm valuation for those that issued equity and debt, over the sample period 01-01-1990 until 31-12-2009. The buy-and-hold abnormal return is calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. Glamour acquirers are measured as the highest third of acquirers as ranked by their market-to-book value one month prior to the deal announcement while Value acquirers are measured as the lowest third of acquirers as ranked by their market-to-book value one month prior to the deal announcement. The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms which did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). Panel A reports the results of glamour acquirers while Panel B reports the results for value acquirers. Panel C reports the differential performance between Panel A and Panel B. The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

Panel A: Glamour Acquirers				
	All	Cash	Stock	Mixed
Issues Equity and Debt				
Mean	19.80%**	22.54%	59.80%	15.86%
P-Value	(0.037)	(0.106)	-	(0.241)
N	62	30	1	31
Non-Issuer				
Mean	-5.53%*	7.75%	-37.02%***	-12.05%***
P-Value	(0.084)	(0.106)	(0.002)	(0.007)
N	622	240	28	354
Differentials				
Diff	25.33%**	14.79%	96.82%	27.91%*
P-Value	(0.012)	(0.309)	-	(0.053)

Panel B: Value Acquirer				
	All	Cash	Stock	Mixed
Issues Equity and Debt				
Mean	-4.41%	7.60%	-33.18%	-8.94%
P-Value	(0.514)	(0.547)	(0.573)	(0.279)
N	55	18	2	35
Non-Issuer				
Mean	-24.29%***	-19.98%***	-44.35%***	-25.21%***
P-Value	(0.000)	(0.002)	(0.005)	(0.000)
N	746	266	37	443
Differentials				
Diff	19.88%***	27.58%*	11.17%	16.26%*
P-Value	(0.010)	(0.057)	(0.836)	(0.082)

Panel C: Glamour – Value				
Issues Equity and Debt				
	All	Cash	Stock	Mixed
Diff	24.21%**	14.94%	92.98%	24.80%
P-Value	(0.037)	(0.419)	-	(0.117)
Does Not Issue Equity or Debt				
	All	Cash	Stock	Mixed
Diff	18.76%***	27.73%***	7.33%	13.16%**
P-Value	(0.000)	(0.001)	(0.690)	(0.033)

Table 45: Five-Day Cross-Sectional Analysis

This table reports the results of the cross-sectional analysis for the short-term. The short-term is modelled using short-term five day (-2,+2) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2009. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The independent variables are as follows: *Issuer* is a binary variable that takes the value of 1 if the acquirer issued debt or equity securities as defined in Table 31, in the three-years prior to the merger announcement; *Debt (Equity) Issuer* is a binary variable that takes the value of 1 if the acquirer issued debt (equity) securities as defined in Table 31, in the three-years prior to the merger announcement; *Hot (Cold) Issuer* is a binary variable that takes the value of one if the acquirer issued debt or equity securities in a hot (cold) month as defined according to Bouwman, Fuller and Nain (2009) using the top (bottom) 25% of a market detrended PE ratio; *Ln(Size)* is the logarithm of the acquirer's market value as measured one month before announcement; *Relative Size* is calculated as the deal value divided by the market value of the acquirer, as measured one month before announcement; *MTBV* is the acquirer's market to book value as measured one month before announcement; *Acquirer (Target) Advisor* is a binary variable that takes the value of one if the acquirer (target) uses a financial advisor throughout the merger process; *Foreign Target* is a binary variable that takes the value of 1 if the target is located outside of the UK; *Competition* is a binary variable that takes the value of 1 if there was more than one offer for the target; *Public Target* is a binary variable that takes the value of 1 if the target is listed on a stock exchange; *Cash(Stock)* is a binary variable that takes the value of 1 if the deal is financed 100% using cash(stock); *Unrelated Target* is a binary variable that takes the value of 1 if the target is in a different to that of the acquirer as measured using the two-digit primary SIC code; *Time Interval* measures the number of days between the announcement and completion dates; *EBITDA* is the acquirer's earnings before interest, tax, depreciation and amortization as measured twelve months before announcement; *ROE* is the acquirer's return on equity as measured twelve months before announcement; *CAPEX/TA* is the acquirer's capital expenditure as a percentage of total assets as measured twelve months before announcement; *TD/TE* is the acquirer's total debt to total equity ratio as measured twelve months before announcement. The possible existence of homoscedasticity is controlled for, with the p-values reported in parentheses using robust standard errors. Statistical significance at the 1%, 5% and 10% levels are denoted ***, ** and * respectively.

	1	2	3	4	5	6	7	8	9	10
Issuer	0.001	-0.000								
	(0.598)	(0.923)								
Debt Issuer			0.005*	0.002						
			(0.095)	(0.390)						
Equity Issuer					0.001	0.000				
					(0.721)	(0.989)				
Hot Issuer							0.001	0.001		
							(0.711)	(0.791)		
Cold Issuer									-0.004	-0.005
									(0.309)	(0.188)
Ln (Size)	-0.007***	-0.006**	-0.008***	-0.006**	-0.006***	-0.006**	0.001***	0.001**	-0.004***	-0.005**
	(0.000)	(0.035)	(0.000)	(0.027)	(0.000)	(0.033)	(0.000)	(0.032)	(0.000)	(0.039)
Relative Size	0.000	0.000***	0.000	0.000***	0.000	0.000***	-0.007	-0.006***	-0.007	-0.006***
	(0.119)	(0.004)	(0.121)	(0.005)	(0.118)	(0.004)	(0.120)	(0.004)	(0.115)	(0.004)
MTBV	-0.000	-0.000	0.000	-0.000	-0.000	-0.000	0.000	0.000	0.000	0.000
	(0.916)	(0.531)	(0.975)	(0.547)	(0.908)	(0.533)	(0.910)	(0.531)	(0.899)	(0.494)
Acquirer Advisor	0.009***	0.007***	0.009***	0.007***	0.009***	0.007***	-0.000***	-0.000***	-0.000***	-0.001***
	(0.000)	(0.005)	(0.000)	(0.005)	(0.001)	(0.005)	(0.001)	(0.005)	(0.001)	(0.005)
Target Advisor	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
	(0.480)	(0.586)	(0.476)	(0.587)	(0.478)	(0.588)	(0.468)	(0.586)	(0.458)	(0.570)
Foreign Target	-0.001	-0.001	-0.001	-0.001	0.692	-0.001	-0.001	-0.001	-0.001	-0.001
	(0.685)	(0.735)	(0.668)	(0.723)	(0.692)	(0.734)	(0.697)	(0.737)	(0.704)	(0.766)
Competition	0.000	0.003	-0.000	0.003	0.000	0.003	0.000	0.003	0.000	0.003
	(0.994)	(0.812)	(0.994)	(0.814)	(0.997)	(0.812)	(0.989)	(0.805)	(0.998)	(0.801)
Public Target	-0.024***	-0.026***	-0.024***	-0.025***	-0.024***	-0.026***	-0.024***	-0.026***	-0.024***	-0.026***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Cash (Stock)	0.005***	0.005**	0.005***	0.005**	0.005***	0.005**	0.005***	0.005**	0.005***	0.005**
	(0.004)	(0.015)	(0.005)	(0.015)	(0.004)	(0.015)	(0.004)	(0.014)	(0.005)	(0.015)
Unrelated Target	-0.001	-0.002	-0.001	-0.002	-0.001	-0.002	-0.001	-0.002	-0.001	-0.002
	(0.796)	(0.457)	(0.736)	(0.453)	(0.788)	(0.466)	(0.754)	(0.461)	(0.729)	(0.450)
Time Interval	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.161)	(0.201)	(0.165)	(0.197)	(0.162)	(0.199)	(0.163)	(0.197)	(0.168)	(0.201)
EBITDA		0.000		0.000		0.000		0.000		0.000
		(0.853)		(0.944)		(0.848)		(0.848)		(0.889)
ROE		0.000		0.000		0.000		0.000		0.000
		(0.654)		(0.657)		(0.655)		(0.655)		(0.655)
CAPEX/TA		-0.000***		-0.000***		-0.000***		-0.000***		-0.000***
		(0.001)		(0.001)		(0.001)		(0.001)		(0.002)
TD/TE		0.000		0.000		0.000		0.000		0.000
		(0.297)		(0.319)		(0.300)		(0.305)		(0.298)
Constant	0.022***	0.022***	0.024***	0.023***	0.022***	0.022***	0.023***	0.022***	0.023***	0.022***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
N	5175	4703	5175	4703	5175	4703	5175	4703	5175	4703
F-Stat	4.98***	4.27***	5.05***	4.27***	4.99***	4.26***	4.98***	4.26***	4.99***	4.34***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
R-Squared	0.01	0.02	0.01	0.02	0.01	0.02	0.01	0.02	0.01	0.02

Table 46: Thirty-Six Month Cross-Sectional Analysis

This table reports the results of the cross-sectional analysis for the long-term. The long-term is modelled using long-term thirty-six month (0,+36) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2009. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The independent variables are as follows: *Issuer* is a binary variable that takes the value of 1 if the acquirer issued debt or equity securities as defined in Table 31, in the three-years prior to the merger announcement; *Debt (Equity) Issuer* is a binary variable that takes the value of 1 if the acquirer issued debt (equity) securities as defined in Table 31, in the three-years prior to the merger announcement; *Hot (Cold) Issuer* is a binary variable that takes the value of one if the acquirer issued debt or equity securities in a hot (cold) month as defined according to Bouwman, Fuller and Nain (2009) using the top (bottom) 25% of a market detrended PE ratio; *Ln(Size)* is the logarithm of the acquirer's market value as measured one month before announcement; *Relative Size* is calculated as the deal value divided by the market value of the acquirer, as measured one month before announcement; *MTBV* is the acquirer's market to book value as measured one month before announcement; *Acquirer (Target) Advisor* is a binary variable that takes the value of one if the acquirer (target) uses a financial advisor throughout the merger process; *Foreign Target* is a binary variable that takes the value of 1 if the target is located outside of the UK; *Competition* is a binary variable that takes the value of 1 if there was more than one offer for the target; *Public Target* is a binary variable that takes the value of 1 if the target is listed on a stock exchange; *Cash(Stock)* is a binary variable that takes the value of 1 if the deal is financed 100% using cash(stock); *Unrelated Target* is a binary variable that takes the value of 1 if the target is in a different to that of the acquirer as measured using the two-digit primary SIC code; *Time Interval* measures the number of days between the announcement and completion dates; *EBITDA* is the acquirer's earnings before interest, tax, depreciation and amortization as measured twelve months before announcement; *ROE* is the acquirer's return on equity as measured twelve months before announcement; *CAPEX/TA* is the acquirer's capital expenditure as a percentage of total assets as measured twelve months before announcement; *TD/TE* is the acquirer's total debt to total equity ratio as measured twelve months before announcement. The possible existence of homoscedasticity is controlled for, with the p-values reported in parentheses using robust standard errors. Statistical significance at the 1%, 5% and 10% levels are denoted ***, ** and * respectively.[22]

[22] The results are checked again stratifying by cash flows, tender offers and hostile deals. There are either issues in regards to the sample sizes being too small, or the results remain unchanged and thus they are not reported.

	1	2	3	4	5	6	7	8	9	10
Issuer	-0.011	0.013								
	(0.629)	(0.592)								
Debt Issuer			0.155***	0.122***						
			(0.000)	(0.000)						
Equity Issuer					-0.026	0.005				
					(0.266)	(0.850)				
Hot Issuer							0.016	0.041		
							(0.612)	(0.223)		
Cold Issuer									0.106**	0.144***
									(0.016)	(0.003)
Ln (Size)	0.037*	-0.060*	0.008	-0.073**	0.035	-0.059*	0.036*	-0.059*	0.034	-0.064**
	(0.089)	(0.060)	(0.734)	(0.022)	(0.107)	(0.065)	(0.097)	(0.062)	(0.120)	(0.046)
Relative Size	0.000**	0.000*	0.000**	0.000*	0.000**	0.000*	0.000**	0.000*	0.000**	0.000
	(0.022)	(0.062)	(0.021)	(0.097)	(0.026)	(0.066)	(0.015)	(0.060)	(0.020)	(0.138)
MTBV	-0.046***	-0.041***	-0.044***	-0.041***	-0.046***	-0.041***	-0.046***	-0.041***	-0.046***	-0.040***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Acquiror Advisor	-0.047*	-0.053**	-0.044*	-0.052*	-0.047*	-0.054**	-0.046*	-0.054**	-0.046*	-0.053**
	(0.067)	(0.047)	(0.089)	(0.053)	(0.066)	(0.046)	(0.071)	(0.046)	(0.072)	(0.047)
Target Advisor	0.095***	0.096***	0.094***	0.097***	0.095***	0.096***	0.094***	0.097***	0.093***	0.095***
	(0.001)	(0.001)	(0.001)	0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
Foreign Acquisition	-0.034	-0.043*	-0.037	-0.045*	-0.035	-0.043*	-0.034	-0.042*	-0.036	-0.046*
	(0.158)	(0.091)	(0.128)	0.082)	(0.155)	(0.093)	(0.156)	(0.097)	(0.142)	(0.074)
Competition	0.039	0.014	0.038	0.012	0.038	0.013	0.042	0.019	0.039	0.009
	(0.792)	(0.935)	(0.797)	0.945)	(0.796)	(0.936)	(0.774)	(0.909)	(0.788)	(0.956)
Public Target	-0.045	-0.039	-0.042	-0.037	-0.045	-0.039	-0.045	-0.041	-0.041	-0.035
	(0.346)	(0.441)	(0.381)	0.463)	(0.340)	(0.437)	(0.345)	(0.417)	(0.391)	(0.481)
Cash (Stock)	0.154***	0.141***	0.153***	0.140***	0.154***	0.141***	0.155***	0.141***	0.156***	0.141***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Unrelated Target	-0.088***	-0.098***	-0.088***	-0.100***	-0.091***	-0.099***	-0.087***	-0.099***	-0.085***	-0.099**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)
Time Interval	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.236)	(0.259)	(0.220)	(0.244)	(0.246)	(0.265)	(0.224)	(0.253)	(0.220)	(0.266)
EBITDA		0.000***		0.000***		0.000***		0.000***		0.000***
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)
ROE		0.000**		0.000**		0.000**		0.000**		0.000**
		(0.012)		(0.012)		(0.012)		(0.013)		(0.013)
CAPEX/TA		-0.002***		-0.002***		-0.002***		-0.002***		-0.002***
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)
TD/TE		0.000*		0.000		0.000*		0.000*		0.000*
		(0.096)		(0.119)		(0.091)		(0.099)		(0.085)
Constant	-0.185***	-0.005	-0.145***	0.023	-0.175***	-0.003	-0.192***	-0.005	-0.196***	-0.003
	(0.001)	(0.941)	0.010)	(0.744)	(0.002)	(0.962)	(0.000)	(0.937)	(0.000)	(0.967)
N	5175	4703	5175	4703	5175	4703	5175	4703	5175	4703
F-Stat	8.65***	12.81***	10.45***	13.43***	8.79***	12.80***	8.68***	12.96***	9.00***	13.65***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
R-Squared	0.02	0.03	0.02	0.03	0.02	0.03	0.02	0.03	0.02	0.03

Table 47: Short-Term Three-Day CARs

This table reports the acquirer short-term three-day cumulative abnormal return for the final sample over the sample period 01-01-1990 until 31-12-2009. The cumulative abnormal return is calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms which did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuer				Equity-Issuer				Debt-Issuer				Differentials			
Mean	0.85%***	1.05%***	-0.92%	0.85%***	0.89%***	1.03%***	-1.09%	0.94%***	0.73%***	1.24%***	2.07%	0.28%	0.16%	-0.21%	-3.15%	0.67%**
P-Value	(0.000)	(0.000)	(0.168)	(0.000)	(0.000)	(0.000)	(0.120)	(0.000)	(0.000)	(0.000)	(0.334)	(0.299)	(0.505)	(0.574)	(0.168)	(0.036)
N	2135	723	85	1327	1889	620	79	1190	459	196	10	253				
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt				Differentials			
Mean	0.88%***	0.96%***	1.13%*	0.81%***	0.54%**	1.16%***	1.23%	0.05%	0.88%***	0.98%***	-1.32%*	0.99%***	-0.34%	0.18%	2.55%	-0.94%***
P-Value	(0.000)	(0.000)	(0.086)	(0.000)	(0.021)	(0.001)	(0.629)	(0.881)	(0.000)	(0.000)	(0.061)	(0.000)	(0.219)	(0.670)	(0.346)	(0.010)
N	3040	1079	137	1824	246	103	6	137	1676	527	75	1074				
	Differentials				Differentials				Differentials							
Diff	-0.03%	0.09%	-2.06%**	0.04%	0.34%	-0.13%	-2.31%	0.90%**	-0.15%	0.26%	3.39%	-0.71%**				
P-Value	(0.835)	(0.704)	(0.029)	(0.856)	(0.200)	(0.755)	(0.389)	(0.013)	(0.534)	(0.500)	(0.142)	(0.029)				

Table 48: Three-Day Returns for Equity and Debt Issuers

This table reports the acquirer short-term three-day cumulative abnormal return for the final sample for those that issued equity and debt, over the sample period 01-01-1990 until 31-12-2009. The cumulative abnormal return is calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms which did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

	All	Cash	Stock	Mixed
		Equity and Debt Issuer		
Mean	0.94%***	1.33%***	3.33%	0.55%
P-Value	(0.005)	(0.009)	(0.462)	(0.223)
N	213	93	4	116
		No Equity or Debt Issuer		
Mean	0.88%***	0.96%***	1.13%*	0.81%***
P-Value	(0.000)	(0.000)	(0.086)	(0.000)
N	3040	1079	137	1824
		Differentials		
Diff	0.06%	0.37%	2.19%	-0.27%
P-Value	(0.859)	(0.475)	(0.621)	(0.569)

Table 49: Three-Day Returns by Size

This table reports the acquirer short-term three-day cumulative abnormal return for the final sample over the sample period 01-01-1990 until 31-12-2009 for those acquirers classified as big and small. The cumulative abnormal return is calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms which did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). Panel A reports the results of big acquirers, measured as the highest third of acquirers as ranked by their market value one month prior to the deal announcement while Panel B reports the results for small acquirers, measured as the lowest third of acquirers as ranked by their market value one month prior to the deal announcement. Panel C reports the differential performance between Panel A and Panel B. The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

Panel A: Big Acquirers																
	Issuer				Equity-Issuer				Debt-Issuer				Differentials			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Mean	0.51%**	0.79%**	2.51%	0.23%	0.57%**	0.67%	2.68%	0.41%	0.75%***	1.24%***	3.28%	0.31%	-0.18%	-0.57%	-0.59%	0.10%
P-Value	(0.012)	(0.011)	(0.254)	(0.394)	(0.035)	(0.114)	(0.348)	(0.239)	(0.002)	(0.001)	(0.291)	(0.326)	(0.613)	(0.298)	(0.881)	(0.836)
N	550	222	13	315	374	151	9	214	328	136	6	186				
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt				Differentials			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Mean	0.33%*	0.73%***	1.22%	-0.01%	0.38%	1.06%***	2.12%	-0.17%	0.15%	0.08%	1.85%	0.10%	0.23%	0.98%	0.26%	-0.27%
P-Value	(0.079)	(0.004)	(0.491)	(0.974)	(0.165)	(0.005)	(0.604)	(0.651)	(0.677)	(0.884)	(0.590)	(0.828)	(0.605)	(0.140)	(0.959)	(0.649)
N	647	271	18	358	176	71	4	101	222	86	7	129				
Differentials																
Diff	0.18%	0.07%	1.29%	0.24%	0.19%	-0.39%	0.57%	0.58%	0.61%	1.16%*	1.42%	0.21%				
P-Value	(0.527)	(0.870)	(0.639)	(0.534)	(0.616)	(0.482)	(0.904)	(0.255)	(0.158)	(0.079)	(0.746)	(0.700)				

Panel B: Small Acquirers																
	Issuer				Equity-Issuer				Debt-Issuer				Differentials			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Mean	1.31%***	1.68%	-1.94%	1.39%***	1.31%***	1.68%**	-1.94%	1.39%***	-	-	-	-	-	-	-	-
P-Value	(0.000)	(0.025)	(0.140)	(0.000)	(0.000)	(0.025)	(0.140)	(0.000)	-	-	-	-	-	-	-	-
N	459	109	20	330	459	109	20	330	-	-	-	-				
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt				Differentials			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Mean	1.57%***	1.62%***	0.51%	1.64%***	-	-	-	-	-	-	-	-	-	-	-	-
P-Value	(0.000)	(0.000)	(0.686)	(0.000)	-	-	-	-	-	-	-	-	-	-	-	-
N	746	218	41	487	-	-	-	-	-	-	-	-				
Differentials																
Diff	-0.26%	0.06%	-2.45%	-0.26%	-	-	-	-	-	-	-	-				
P-Value	(0.508)	(0.946)	(0.174)	(0.594)	-	-	-	-	-	-	-	-				

Panel C: Glamour - Value												
	Issuer				Equity-Issuer				Debt-Issuer			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Diff	-0.80%**	-0.88%	4.45%*	-1.16%***	-0.74%*	-1.01%	4.63%	-0.98%**	-	-	-	-
P-Value	(0.032)	(0.271)	(0.083)	(0.009)	(0.073)	(0.237)	(0.147)	(0.050)	-	-	-	-
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt			
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
Diff	-1.24%***	-0.89%**	0.71%	-1.65%***	-	-	-	-	-	-	-	-
P-Value	(0.000)	(0.034)	(0.743)	(0.000)	-	-	-	-	-	-	-	-

Table 50: Three-Day Returns for Equity and Debt Issuers by Size

This table reports the acquirer short-term three-day cumulative abnormal return for the final sample over the sample period 01-01-1990 until 31-12-2009 for those acquirers classified as big that issued both equity and debt. The cumulative abnormal return is calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. Big acquirers are measured as the highest third of acquirers as ranked by their market value one month prior to the deal announcement The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms which did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

Panel A: Equity and Debt Issuer				
	All	Cash	Stock	Mixed
Mean	1.19%***	1.44%**	5.59%	0.89%
P-Value	(0.005)	(0.027)	(0.477)	(0.104)
N	152	65	2	85
Panel B: No Equity or Debt Issuer				
	All	Cash	Stock	Mixed
Mean	0.33%*	0.73%***	1.22%	-0.01%
P-Value	(0.079)	(0.004)	(0.491)	(0.974)
N	647	271	18	358
Panel C: Differentials				
Diff	0.85%*	0.72%	4.38%	0.90%
P-Value	(0.061)	(0.300)	(0.550)	(0.140)

Table 51: Three-Day Returns by Valuation

This table reports the acquirer short-term three-day cumulative abnormal return for the final sample over the sample period 01-01-1990 until 31-12-2009 for those acquirers classified as glamour and value. The cumulative abnormal return is calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms which did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). Panel A reports the results of glamour acquirers, measured as the highest third of acquirers as ranked by their market-to-book value one month prior to the deal announcement while Panel B reports the results for value acquirers, measured as the lowest third of acquirers as ranked by their market-to-book value one month prior to the deal announcement. Panel C reports the differential performance between Panel A and Panel B. The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

Panel A: Glamour Acquirers																
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuer				Equity-Issuer				Debt-Issuer				Differentials			
Mean	0.75%***	0.97%**	-1.79%	0.80%**	0.68%**	0.91%**	-2.60%*	0.77%**	1.13%**	1.43%*	2.10%	0.83%	-0.45%	-0.52%	-4.70%	-0.06%
P-Value	(0.002)	(0.012)	(0.227)	(0.013)	(0.012)	(0.032)	(0.075)	(0.027)	(0.011)	(0.054)	(0.747)	(0.106)	(0.376)	(0.539)	(0.496)	(0.923)
N	531	175	22	334	472	152	20	300	121	53	3	65				
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt				Differentials			
Mean	1.24%***	1.01%***	1.86%	1.34%***	1.24%***	1.04%***	2.16%	1.31%***	1.00%***	0.93%***	0.14%	1.10%***	0.25%	0.11%	2.02%	0.21%
P-Value	(0.000)	(0.001)	(0.357)	(0.000)	(0.000)	(0.000)	(0.262)	(0.000)	(0.000)	(0.000)	(0.919)	(0.000)	(0.421)	(0.763)	(0.386)	(0.632)
N	622	240	28	354	681	263	30	388	1032	362	47	623				
	Differentials															
Diff	-0.49%	-0.04%	-3.65%	-0.54%	-0.57%	-0.13%	-4.77%**	-0.54%	0.13%	0.50%	1.96%	-0.27%				
P-Value	(0.168)	(0.928)	(0.143)	(0.274)	(0.113)	(0.801)	(0.047)	(0.273)	(0.787)	(0.514)	(0.765)	(0.639)				

Panel B: Value Acquirers																
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuer				Equity-Issuer				Debt-Issuer				Differentials			
Mean	0.78%***	0.87%**	-0.48%	0.83%***	0.80%***	0.77%*	-0.36%	0.90%**	0.80%**	1.12%**	5.24%	0.37%	0.00%	-0.34%	-5.60%	0.53%
P-Value	(0.001)	(0.012)	(0.671)	(0.010)	(0.003)	(0.058)	(0.759)	(0.011)	(0.018)	(0.033)	(0.364)	(0.366)	(0.997)	(0.600)	(0.338)	(0.329)
N	556	181	27	348	485	147	26	312	126	52	3	71				
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt				Differentials			
Mean	0.66%***	0.90%***	1.10%	0.48%*	0.66%**	1.28%**	-3.66%	0.20%	0.78%***	0.77%*	-1.20%	0.95%**	-0.11%	0.51%	-2.46%	-0.75%
P-Value	(0.000)	(0.001)	(0.341)	(0.059)	(0.048)	(0.019)	-	(0.622)	(0.008)	(0.080)	(0.280)	(0.016)	(0.794)	(0.453)	-	(0.177)
N	746	266	37	443	71	34	1	36	430	129	24	277				
	Differentials															
Diff	0.12%	-0.03%	-1.58%	0.36%	0.14%	-0.51%	3.30%	0.71%	0.02%	0.35%	6.43%	-0.58%				
P-Value	(0.684)	(0.942)	(0.326)	(0.384)	(0.747)	(0.444)	-	(0.185)	(0.963)	(0.606)	(0.286)	(0.310)				

Panel C: Glamour – Value Acquirers												
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuer				Equity-Issuer				Debt-Issuer			
Diff	-0.03%	0.10%	-1.31%	-0.03%	-0.12%	0.14%	-2.25%	-0.13%	0.33%	0.32%	-3.14%	0.46%
P-Value	(0.926)	(0.846)	(0.476)	(0.944)	(0.747)	(0.812)	(0.219)	(0.792)	(0.544)	(0.722)	(0.688)	(0.482)
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt			
Diff	0.58%*	0.11%	0.76%	0.86%*	0.58%	-0.24%	5.82%	1.12%**	0.22%	0.16%	1.33%	0.15%
P-Value	(0.067)	(0.771)	(0.742)	(0.056)	(0.152)	(0.684)	-	(0.036)	(0.522)	(0.749)	(0.442)	(0.745)

Table 52: Three-Day Returns for Equity and Debt Issuers by Valuation

This table reports the acquirer short-term three-day cumulative abnormal return for the final sample over the sample period 01-01-1990 until 31-12-2009 for those acquirers classified as glamour and value that issued both equity and debt. The cumulative abnormal return is calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. Glamour acquirers are measured as the highest third of acquirers as ranked by their market-to-book value one month prior to the deal announcement while Value acquirers are measured as the lowest third of acquirers as ranked by their market-to-book value one month prior to the deal announcement. The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms that did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). Panel A reports the results of glamour acquirers while Panel B reports the results for value acquirers. Panel C reports the differential performance between Panel A and Panel B. The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

Panel A: Glamour Acquirers				
	All	Cash	Stock	Mixed
Equity and Debt Issuer				
Mean	0.93%	1.51%	-6.45%	0.61%
P-Value	(0.187)	(0.193)	-	(0.473)
N	62	30	1	31
No Equity or Debt Issuer				
Mean	1.24%***	1.01%***	1.86%	1.34%***
P-Value	(0.000)	(0.001)	(0.357)	(0.000)
N	622	240	28	354
Differentials				
Diff	-0.30%	0.50%	-8.31%	-0.73%
P-Value	(0.684)	(0.674)	-	(0.437)

Panel B: Value Acquirers				
	All	Cash	Stock	Mixed
Equity and Debt Issuer				
Mean	0.97%	0.81%	9.69%*	0.56%
P-Value	(0.130)	(0.481)	(0.073)	(0.453)
N	55	18	2	35
No Equity or Debt Issuer				
Mean	0.66%***	0.90%***	1.10%	0.48%*
P-Value	(0.000)	(0.001)	(0.341)	(0.059)
N	746	266	37	443
Differentials				
Diff	0.31%	-0.09%	8.58%***	0.08%
P-Value	(0.637)	(0.936)	(0.005)	(0.918)

Panel C: Glamour – Value Acquirers				
	All	Cash	Stock	Mixed
Equity and Debt Issuer				
Diff	-0.04%	0.70%	-16.14%	0.06%
P-Value	(0.968)	(0.662)	-	(0.959)
No Equity or Debt Issuer				
Diff	0.58%*	0.11%	0.76%	0.86%*
P-Value	(0.067)	(0.771)	(0.742)	(0.056)

Table 53: Three-Day Cross-Sectional Analysis (-1,+1)

This table reports the results of the cross-sectional analysis for the short-term. The short-term is modelled using short-term three day (-1,+1) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2009. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The independent variables are as follows: *Issuer* is a binary variable that takes the value of 1 if the acquirer issued debt or equity securities as defined in Table 31, in the three-years prior to the merger announcement; *Debt (Equity) Issuer* is a binary variable that takes the value of 1 if the acquirer issued debt (equity) securities as defined in Table 31, in the three-years prior to the merger announcement; *Hot (Cold) Issuer* is a binary variable that takes the value of one if the bidder issued debt or equity securities in a hot (cold) month as defined according to Bouwman, Fuller and Nain (2009) using the top (bottom) 25% of a market detrended PE ratio; *Ln(Size)* is the logarithm of the acquirer's market value as measured one month before announcement; *Relative Size* is calculated as the deal value divided by the market value of the acquirer, as measured one month before announcement; *MTBV* is the acquirer's market to book value as measured one month before announcement; *Acquirer (Target) Advisor* is a binary variable that takes the value of one if the acquirer (target) uses a financial advisor throughout the merger process; *Foreign Target* is a binary variable that takes the value of 1 if the target is located outside of the UK; *Competition* is a binary variable that takes the value of 1 if there was more than one offer for the target; *Public Target* is a binary variable that takes the value of 1 if the target is listed on a stock exchange; *Cash(Stock)* is a binary variable that takes the value of 1 if the deal is financed 100% using cash(stock); *Unrelated Target* is a binary variable that takes the value of 1 if the target is in a different to that of the acquirer as measured using the two-digit primary SIC code; *Time Interval* measures the number of days between the announcement and completion dates; *EBITDA* is the acquirer's earnings before interest, tax, depreciation and amortization as measured twelve months before announcement; *ROE* is the acquirer's return on equity as measured twelve months before announcement; *CAPEX/TA* is the acquirer's capital expenditure as a percentage of total assets as measured twelve months before announcement; *TD/TE* is the acquirer's total debt to total equity ratio as measured twelve months before announcement. The possible existence of homoscedasticity is controlled for, with the p-values reported in parentheses using robust standard errors. Statistical significance at the 1%, 5% and 10% levels are denoted ***, ** and * respectively.

	1	2	3	4	5	6	7	8	9	10
Issuer	0.000	0.000								
	(0.926)	(0.893)								
Debt Issuer			0.004*	0.003						
			(0.091)	(0.232)						
Equity Issuer					0.000	0.000				
					(0.920)	(0.882)				
Hot Issuer							0.002	0.002		
							(0.329)	(0.325)		
Cold Issuer									-0.003	-0.003
									(0.312)	(0.336)
Ln (Size)	-0.007***	-0.004**	-0.008***	-0.005**	-0.007***	-0.004**	-0.007***	-0.004**	-0.007***	-0.004**
	(0.000)	(0.040)	(0.000)	(0.029)	(0.000)	(0.039)	(0.000)	(0.037)	(0.000)	(0.044)
Relative Size	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.465)	(0.128)	(0.481)	(0.140)	(0.463)	(0.128)	(0.490)	(0.124)	(0.456)	(0.114)
MTBV	0.000	-0.001	0.000	-0.001	0.000	-0.001	0.000	-0.001	0.000	-0.001
	(0.475)	(0.179)	(0.527)	(0.189)	(0.474)	(0.179)	(0.474)	(0.175)	(0.466)	(0.165)
Acquirer Advisor	0.008***	0.006***	0.008***	0.006***	0.008***	0.006***	0.008***	0.006***	0.008***	0.006***
	(0.000)	(0.002)	(0.000)	(0.002)	(0.000)	(0.002)	(0.000)	(0.002)	(0.000)	(0.002)
Target Advisor	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
	(0.138)	(0.147)	(0.140)	(0.148)	(0.137)	(0.146)	(0.134)	(0.144)	(0.132)	(0.143)
Foreign Acquisition	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.948)	(0.957)	(0.921)	(0.977)	(0.949)	(0.959)	(0.961)	(0.949)	(0.962)	(0.934)
Competition	-0.005	-0.001	-0.005	-0.001	-0.005	-0.001	-0.005	-0.001	-0.005	-0.001
	(0.501)	(0.918)	(0.494)	(0.915)	(0.499)	(0.919)	(0.529)	(0.947)	(0.502)	(0.928)
Public Target	-0.021***	-0.022***	-0.021***	-0.022***	-0.021***	-0.022	-0.022***	-0.022***	-0.022***	-0.022***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Cash (Stock)	0.003**	0.003*	0.003**	0.003*	0.003**	0.003*	0.003**	0.003*	0.003**	0.003*
	(0.030)	(0.070)	(0.031)	(0.070)	(0.030)	(0.071)	(0.028)	(0.066)	(0.031)	(0.071)
Unrelated Target	-0.001	-0.002	-0.001	-0.002	-0.001	-0.002	-0.001	-0.001	-0.001	-0.002
	(0.669)	(0.417)	(0.644)	(0.415)	(0.654)	(0.415)	(0.670)	(0.434)	(0.639)	(0.415)
Time Interval	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.256)	(0.266)	(0.256)	(0.260)	(0.258)	(0.266)	(0.251)	(0.257)	(0.260)	(0.265)
EBITDA		0.000		0.000		0.000		0.000		0.000
		(0.311)		(0.240)		(0.308)		(0.316)		(0.296)
ROE		0.000		0.000		0.000		0.000		0.000
		(0.142)		(0.136)		(0.143)		(0.136)		(0.141)
CAPEX/TA		0.000**		0.000**		0.000**		0.000**		0.000**
		(0.020)		(0.021)		(0.020)		(0.020)		(0.028)
TD/TE		0.000		0.000		0.000		0.000		0.000
		(0.443)		(0.479)		(0.442)		(0.476)		(0.446)
Constant	0.022***	0.019***	0.023	0.020***	0.022***	0.019***	0.022***	0.019***	0.022***	0.019***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
N	5175	4703	5175	4703	5175	4703	5175	4703	5175	4703
F-Stat	5.89***	4.44***	5.97***	4.51***	5.89***	4.44***	5.92***	4.53***	5.90***	4.50***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
R-Squared	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

Table 54: Twenty-Four Month BHARs

This table reports the acquirer long-term twenty-four month buy-and-hold abnormal return for the final sample over the sample period 01-01-1990 until 31-12-2009. The buy-and-hold abnormal return is calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms that did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuer				Equity-Issuer				Debt-Issuer				Differentials			
Mean	-18.04%***	-7.18%***	-55.48%***	-21.57%***	-19.26%***	-8.34%***	-55.93%***	-22.52%***	-7.36%***	0.14%	-38.47%**	-11.95%***	-11.90%***	-8.49%*	-17.46%	-10.57%***
P-Value	(0.000)	(0.004)	(0.000)	(0.000)	(0.000)	(0.003)	(0.000)	(0.000)	(0.001)	(0.966)	(0.032)	(0.000)	(0.000)	(0.053)	(0.314)	(0.003)
N	2135	723	85	1327	1889	620	79	1190	459	196	10	253				
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt				Differentials			
Mean	-12.72%***	-7.94%***	-28.29%***	-14.38%***	-8.70%***	-0.19%	-49.58%*	-13.31%***	-20.97%***	-9.90%***	-57.75%***	-23.83%***	12.27%***	9.72%*	8.17%	10.52%**
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.005)	(0.967)	(0.084)	(0.001)	(0.000)	(0.002)	(0.000)	(0.000)	(0.001)	(0.077)	(0.746)	(0.024)
N	3040	1079	137	1824	246	103	6	137	1676	527	75	1074				
	Differentials															
Diff	-5.33%***	0.76%	-27.19%***	-7.19%***	-10.56%***	-8.15%	-6.35%	-9.20%**	13.61%***	10.05%**	19.28%	11.88%***				
P-Value	(0.005)	(0.808)	(0.001)	(0.003)	(0.002)	(0.124)	(0.800)	(0.044)	(0.000)	(0.030)	(0.271)	(0.001)				

Table 55: Twenty-Four Month BHARs for Equity and Debt Issuers

This table reports the acquirer long-term twenty-four month buy-and-hold abnormal return for the final sample for those that issued equity and debt, over the sample period 01-01-1990 until 31-12-2009. The buy-and-hold abnormal return is calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms which did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

	All	Cash	Stock	Mixed
		Equity and Debt Issuer		
Mean	-5.82%*	0.51%	-21.81%	-10.34%**
P-Value	(0.073)	(0.921)	(0.269)	(0.015)
N	213	93	4	116
		No Equity or Debt Issuer		
Mean	-12.72%***	-7.94%***	-28.29%***	-14.38%***
P-Value	(0.000)	(0.000)	(0.000)	(0.000)
N	3040	1079	137	1824
		Differentials		
Diff	6.90%**	8.45%	6.48%	4.04%
P-Value	(0.045)	(0.125)	(0.723)	(0.368)

Table 56: Twenty-Four Month BHARs by Size

This table reports the acquirer long-term twenty-four month buy-and-hold abnormal return for the final sample over the sample period 01-01-1990 until 31-12-2009 for those acquirers classified as big and small. The buy-and-hold abnormal return is calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms which did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). Panel A reports the results of big acquirers, measured as the highest third of acquirers as ranked by their market value one month prior to the deal announcement while Panel B reports the results for small acquirers, measured as the lowest third of acquirers as ranked by their market value one month prior to the deal announcement. Panel C reports the differential performance between Panel A and Panel B. The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

Panel A: Big Acquirers																
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuer				Equity-Issuer				Debt-Issuer				Differentials			
Mean	-11.32%***	-9.65%***	-22.16%	-12.05%***	-12.32%***	-13.75%***	-12.33%	-11.30%***	-6.12%***	-1.66%	-32.89%	-8.52%***	-6.19%*	-12.09%**	20.56%	-2.78%
P-Value	(0.000)	(0.002)	(0.148)	(0.000)	(0.000)	(0.001)	(0.434)	(0.002)	(0.008)	(0.620)	(0.203)	(0.008)	(0.073)	(0.019)	(0.465)	(0.556)
N	550	222	13	315	374	151	9	214	328	136	6	186				
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt				Differentials			
Mean	-12.90%***	-11.64%***	-17.99%	-13.60%***	-9.20%***	-0.91%	-44.28%	-13.63%***	-18.99%***	-22.27%***	-12.97%	-17.13%***	9.80%*	21.36%***	-31.31%	3.50%
P-Value	(0.000)	(0.000)	(0.145)	(0.000)	(0.007)	(0.854)	(0.273)	(0.003)	(0.000)	(0.000)	(0.527)	(0.001)	(0.051)	(0.005)	(0.450)	(0.604)
N	647	271	18	358	176	71	4	101	222	86	7	129				
Differentials																
Diff	1.58%	2.00%	-4.17%	1.55%	-3.12%	-12.84%**	31.95%	2.33%	12.87%***	20.61%***	-19.92%	8.61%				
P-Value	(0.567)	(0.641)	(0.824)	(0.675)	(0.461)	(0.042)	(0.425)	(0.684)	(0.003)	(0.002)	(0.516)	(0.148)				

Panel B: Small Acquirers																
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuer				Equity-Issuer				Debt-Issuer				Differentials			
Mean	-25.64%***	-15.52%*	-55.39%***	-27.17%***	-25.64%***	-15.52%*	-55.39%***	-27.17%***	-	-	-	-	-	-	-	-
P-Value	(0.000)	(0.094)	(0.003)	(0.000)	(0.000)	(0.094)	(0.003)	(0.000)	-	-	-	-	-	-	-	-
N	459	109	20	330	459	109	20	330	-	-	-	-				
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt				Differentials			
Mean	-10.36%***	0.70%	-35.75%***	-13.17%***	-	-	-	-	-	-	-	-	-	-	-	-
P-Value	(0.000)	(0.898)	(0.000)	(0.000)	-	-	-	-	-	-	-	-	-	-	-	-
N	746	218	41	482	-	-	-	-	-	-	-	-				
	Differentials															
Diff	-15.28%***	-16.22%	-19.64%	-14.01%**	-	-	-	-	-	-	-	-				
P-Value	(0.002)	(0.131)	(0.304)	(0.017)	-	-	-	-	-	-	-	-				

Panel C: Big – Small Acquirers												
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuer				Equity-Issuer				Debt-Issuer			
Diff	14.32%***	5.87%	33.22%	15.12%***	13.32%***	1.77%	43.05%*	15.87%***	-	-	-	-
P-Value	(0.002)	(0.546)	(0.139)	(0.005)	(0.006)	(0.860)	(0.065)	(0.007)	-	-	-	-
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt			
Diff	-2.55%	-12.34%**	17.75%	-0.43%	-	-	-	-	-	-	-	-
P-Value	(0.457)	(0.048)	(0.239)	(0.920)	-	-	-	-	-	-	-	-

Table 57: Twenty-Four Month BHARs for Equity and Debt Issuers by Size

This table reports the acquirer long-term twenty-four month buy-and-hold abnormal return for the final sample for those that issued equity and debt, over the sample period 01-01-1990 until 31-12-2009. The buy-and-hold abnormal return is calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. Big acquirers are measured as the highest third of acquirers as ranked by their market value one month prior to the deal announcement The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms which did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

	All	Cash	Stock	Mixed
		Equity and Debt Issuer		
Mean	-2.57%	-2.49%	-10.11%	-2.45%
P-Value	(0.405)	(0.584)	(0.608)	(0.569)
N	152	65	2	85
		No Equity or Debt Issuer		
Mean	-12.90%***	-11.64%***	-17.99%	-13.60%***
P-Value	(0.000)	(0.000)	(0.145)	(0.000)
N	647	271	18	358
		Differentials		
Diff	10.33%***	9.15%*	7.88%	11.15%*
P-Value	(0.004)	(0.094)	(0.701)	(0.072)

Table 58: Twenty-Four Month BHARs by Valuation

This table reports the acquirer long-term twenty-four month buy-and-hold abnormal return for the final sample over the sample period 01-01-1990 until 31-12-2009 for those acquirers classified as glamour and value. The buy-and-hold abnormal return is calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms which did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). Panel A reports the results of glamour acquirers, measured as the highest third of acquirers as ranked by their market-to-book value one month prior to the deal announcement while Panel B reports the results for value acquirers, measured as the lowest third of acquirers as ranked by their market-to-book value one month prior to the deal announcement. Panel C reports the differential performance between Panel A and Panel B. The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

Panel A: Glamour Acquirers																
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuer				Equity-Issuer				Debt-Issuer				Differentials			
Mean	-9.63%***	-1.26%	-49.74%***	-11.37%**	-10.09%***	-1.84%	-44.85%***	-11.96%**	1.15%	8.64%	-65.97%	-1.86%	-11.24%*	-10.48%	21.12%	-10.10%
P-Value	(0.004)	(0.796)	(0.000)	(0.012)	(0.005)	(0.734)	(0.001)	(0.015)	(0.821)	(0.267)	(0.182)	(0.782)	(0.072)	(0.268)	(0.593)	(0.225)
N	531	175	22	334	472	152	20	300	121	53	3	65				
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt				Differentials			
Mean	1.29%	7.96%**	-20.91%*	-1.47%	0.66%	7.48%**	-26.10%**	-1.89%	-4.31%**	3.40%	-31.53%***	-6.74%**	4.98%	4.08%	5.44%	4.85%
P-Value	(0.599)	(0.050)	(0.055)	(0.647)	(0.775)	(0.050)	(0.018)	(0.534)	(0.048)	(0.317)	(0.000)	(0.022)	(0.119)	(0.423)	(0.678)	(0.252)
N	622	240	28	354	681	263	30	388	1032	362	47	623				
Differentials																
Diff	-10.92%***	-9.22%	-28.83%*	-9.90%*	-10.76%**	-9.32%	-18.76%	-10.07%*	5.46%	5.24%	-34.44%	4.88%				
P-Value	(0.008)	(0.146)	(0.060)	(0.073)	(0.012)	(0.159)	(0.226)	(0.081)	(0.324)	(0.535)	(0.404)	(0.507)				

Panel B: Value Acquirers																
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuer				Equity-Issuer				Debt-Issuer				Differentials			
Mean	-24.51%***	-13.50%***	-73.23%***	-26.46%***	-25.07%***	-15.16%***	-72.75%***	-25.77%***	-15.73%***	-3.47%	-49.34%	-23.29%***	-9.35%*	-11.69%	-23.41%	-2.49%
P-Value	(0.000)	(0.006)	(0.000)	(0.000)	(0.000)	(0.009)	(0.000)	(0.000)	(0.000)	(0.558)	(0.213)	(0.000)	(0.059)	(0.155)	(0.489)	(0.691)
N	556	181	27	348	485	147	26	312	126	52	3	71				
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt				Differentials			
Mean	-13.09%***	-12.47%***	-36.26%***	-11.53%***	-20.65%***	-6.33%	-85.79%	-32.37%***	-27.08%***	-17.55%***	-76.22%***	-27.27%***	6.43%	11.21%	-9.57%	-5.10%
P-Value	(0.000)	(0.006)	(0.003)	(0.002)	(0.001)	(0.448)	-	(0.000)	(0.000)	(0.007)	(0.000)	(0.000)	(0.336)	(0.286)	-	(0.550)
N	746	266	37	443	71	34	1	36	430	129	24	277				
	Differentials															
Diff	-11.42%***	-1.03%	-36.97%**	-14.92%***	-4.42%	-8.83%	13.04%	6.59%	11.36%**	14.08%	26.88%	3.98%				
P-Value	(0.004)	(0.876)	(0.014)	(0.004)	(0.496)	(0.381)	-	(0.428)	(0.029)	(0.107)	(0.434)	(0.542)				

Panel C: Glamour – Value Acquirers												
	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed	All	Cash	Stock	Mixed
	Issuer				Equity-Issuer				Debt-Issuer			
Diff	14.88%***	12.24%*	23.49%	15.08%***	14.98%***	13.32%*	27.89%*	13.82%**	16.88%***	12.11%	-16.63%	21.42%**
P-Value	(0.001)	(0.077)	(0.109)	(0.009)	(0.002)	(0.090)	(0.069)	(0.028)	(0.008)	(0.214)	(0.717)	(0.011)
	Non-Issuer				Does Not Issue Equity				Does Not Issue Debt			
Diff	14.38%***	20.43%***	15.34%	10.06%**	21.32%***	13.82%	59.69%	30.48%***	22.77%***	20.95%***	44.68%***	20.53%***
P-Value	(0.000)	(0.001)	(0.319)	(0.038)	(0.001)	(0.134)	-	(0.000)	(0.000)	(0.004)	(0.001)	(0.000)

Table 59: Twenty-Four Month BHARs for Equity and Debt Issuers by Valuation

This table reports the acquirer long-term twenty-four month buy-and-hold abnormal return for the final sample stratified by firm valuation for those that issued equity and debt, over the sample period 01-01-1990 until 31-12-2009. The buy-and-hold abnormal return is calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. Glamour acquirers are measured as the highest third of acquirers as ranked by their market-to-book value one month prior to the deal announcement while Value acquirers are measured as the lowest third of acquirers as ranked by their market-to-book value one month prior to the deal announcement. The Issuer (Non-Issuer) sample contains deals in which the acquirer issued (did not issue) either debt or equity securities, as classified in Table 31, in the three-years prior to the merger announcement. The Equity (Debt) Issuer sample contains deals in which the acquirer issued equity (debt) securities, as classified in Table 31, in the three-years prior to the merger announcement. The Does Not Issue Equity (Does Not Issue Debt) sample contains those firms which did not issue equity (debt) during the observation period. Cash deals refer to those deals which were financed 100% using cash (Cash); stock deals refer to those which were financed 100% using equity (Stock); and Mixed deals refer to those deals which were financed using equity and cash (Mixed). Panel A reports the results of glamour acquirers while Panel B reports the results for value acquirers. Panel C reports the differential performance between Panel A and Panel B. The P-Value is reported and is calculated using the one-sample t-test for CARs and two-sample t-test controlling for the size difference between the sub-samples. Statistical significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

Panel A: Glamour Acquirers				
	All	Cash	Stock	Mixed
Equity and Debt Issuer				
Mean	7.90%	13.32%	-0.62%	2.93%
P-Value	(0.277)	(0.235)	-	(0.767)
N	62	30	1	31
No Equity or Debt Issuer				
Mean	1.29%	7.96%**	-20.91%*	-1.47%
P-Value	(0.599)	(0.050)	(0.055)	(0.647)
N	622	240	28	354
Differentials				
Diff	6.61%	5.37%	20.30%	4.40%
P-Value	(0.388)	(0.649)	-	(0.672)

Panel B: Value Acquirers				
	All	Cash	Stock	Mixed
Equity and Debt Issuer				
Mean	-9.37%**	1.95%	-31.11%	-13.94%**
P-Value	(0.049)	(0.780)	(0.540)	(0.027)
N	55	18	2	35
No Equity or Debt Issuer				
Mean	-13.09%***	-12.47%***	-36.26%***	-11.53%***
P-Value	(0.000)	(0.006)	(0.003)	(0.002)
N	746	266	37	443
Differentials				
Diff	3.73%	14.42%*	5.14%	-2.41%
P-Value	(0.491)	(0.088)	(0.909)	(0.733)

Panel C: Glamour – Value Acquirers				
	All	Cash	Stock	Mixed
Equity and Debt Issuer				
Diff	17.27%**	11.38%	30.49%	16.88%
P-Value	(0.047)	(0.385)	-	(0.148)
No Equity or Debt Issuer				
Diff	14.38%***	20.43%***	15.34%	10.06%**
P-Value	(0.000)	(0.001)	(0.319)	(0.038)

Table 60: Twenty-Four Month Cross-Sectional Analysis (0,+24)

This table reports the results of the cross-sectional analysis for the long-term. The long-term is modelled using long-term twenty-four month (0,+24) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2009. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The independent variables are as follows: *Issuer* is a binary variable that takes the value of 1 if the acquirer issued debt or equity securities as defined in Table 31, in the three-years prior to the merger announcement; *Debt (Equity) Issuer* is a binary variable that takes the value of 1 if the acquirer issued debt (equity) securities as defined in Table 31, in the three-years prior to the merger announcement; *Hot (Cold) Issuer* is a binary variable that takes the value of one if the bidder issued debt or equity securities in a hot (cold) month as defined according to Bouwman, Fuller and Nain (2009) using the top (bottom) 25% of a market detrended PE ratio; *Ln(Size)* is the logarithm of the acquirer's market value as measured one month before announcement; *Relative Size* is calculated as the deal value divided by the market value of the acquirer, as measured one month before announcement; *MTBV* is the acquirer's market to book value as measured one month before announcement; *Acquirer (Target) Advisor* is a binary variable that takes the value of one if the acquirer (target) uses a financial advisor throughout the merger process; *Foreign Target* is a binary variable that takes the value of 1 if the target is located outside of the UK; *Competition* is a binary variable that takes the value of 1 if there was more than one offer for the target; *Public Target* is a binary variable that takes the value of 1 if the target is listed on a stock exchange; *Cash(Stock)* is a binary variable that takes the value of 1 if the deal is financed 100% using cash(stock); *Unrelated Target* is a binary variable that takes the value of 1 if the target is in a different to that of the acquirer as measured using the two-digit primary SIC code; *Time Interval* measures the number of days between the announcement and completion dates; *EBITDA* is the acquirer's earnings before interest, tax, depreciation and amortization as measured twelve months before announcement; *ROE* is the acquirer's return on equity as measured twelve months before announcement; *CAPEX/TA* is the acquirer's capital expenditure as a percentage of total assets as measured twelve months before announcement; *TD/TE* is the acquirer's total debt to total equity ratio as measured twelve months before announcement. The possible existence of homoscedasticity is controlled for, with the p-values reported in parentheses using robust standard errors. Statistical significance at the 1%, 5% and 10% levels are denoted ***, ** and * respectively.

	1	2	3	4	5	6	7	8	9	10
Issuer	-0.057***	-0.035*								
	(0.002)	(0.077)								
Debt Issuer			0.088***	0.057**						
			(0.001)	(0.030)						
Equity Issuer					-0.073***	-0.045**				
					(0.000)	(0.028)				
Hot Issuer							-0.060**	-0.056*		
							(0.038)	(0.058)		
Cold Issuer									0.066**	0.100**
									(0.030)	(0.002)
Ln (Size)	0.003	-0.071***	-0.017	-0.082***	-0.003	-0.073***	0.000	-0.074***	-0.002	-0.079***
	(0.870)	(0.004)	(0.377)	(0.001)	(0.851)	(0.003)	(0.983)	(0.003)	(0.919)	(0.002)
Relative Size	0.000***	0.000**	0.000***	0.000**	0.000***	0.000**	0.000***	0.000**	0.000***	0.000***
	(0.003)	(0.033)	(0.000)	(0.019)	(0.006)	(0.038)	(0.005)	(0.026)	(0.000)	(0.008)
MTBV	-0.033***	-0.027***	-0.032***	-0.026***	-0.033***	-0.027***	-0.033***	-0.027***	-0.033***	-0.026***
	(0.000)	(0.001)	(0.000)	(0.002)	(0.000)	(0.001)	(0.000)	(0.002)	(0.000)	(0.002)
Acquirer Advisor	-0.018	-0.013	-0.014	-0.011	-0.018	-0.012	-0.017	-0.012	-0.016	-0.011
	(0.424)	(0.585)	(0.530)	(0.644)	(0.438)	(0.594)	(0.470)	(0.612)	(0.491)	(0.630)
Target Advisor	0.078***	0.072***	0.076***	0.071***	0.079***	0.073***	0.075***	0.070***	0.075***	0.070***
	(0.002)	(0.003)	(0.002)	(0.004)	(0.002)	(0.003)	(0.003)	(0.005)	(0.003)	(0.005)
Foreign Acquisition	-0.021	-0.031	-0.023	-0.032	-0.022	-0.031	-0.023	-0.032	-0.023	-0.034
	(0.301)	(0.138)	(0.245)	(0.117)	(0.274)	(0.129)	(0.259)	(0.118)	(0.260)	(0.106)
Competition	0.124	0.135	0.128	0.135	0.124	0.136	0.120	0.128	0.128	0.133
	(0.309)	(0.334)	(0.289)	(0.332)	(0.308)	(0.330)	(0.318)	(0.357)	(0.283)	(0.335)
Public Target	-0.105***	-0.094**	-0.101**	-0.092**	-0.105***	-0.094**	-0.100**	-0.090**	-0.100**	-0.090**
	(0.009)	(0.027)	(0.013)	(0.031)	(0.009)	(0.027)	(0.014)	(0.034)	(0.013)	(0.034)
Cash (Stock)	0.111***	0.096***	0.112***	0.097***	0.110***	0.096***	0.111***	0.096***	0.113***	0.098***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Unrelated Target	-0.051**	-0.059**	-0.045**	-0.055**	-0.054**	-0.061**	-0.045**	-0.056**	-0.043*	-0.054**
	(0.023)	(0.013)	(0.045)	(0.019)	(0.017)	(0.010)	(0.045)	(0.018)	(0.054)	(0.021)
Time Interval	0.000	0.000	0.000*	0.000	0.000	0.000	0.000*	0.000	0.000*	0.000
	(0.112)	(0.157)	(0.080)	(0.125)	(0.118)	(0.159)	(0.092)	(0.150)	(0.081)	(0.134)
EBITDA		0.000***		0.000***		0.000***		0.000***		0.000***
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)
ROE		0.000		0.000		0.000		0.000		0.000
		(0.190)		(0.180)		(0.192)		(0.182)		(0.185)
CAPEX/TA		-0.001***		-0.001***		-0.001***		-0.001***		-0.002***
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)
TD/TE		0.000		0.000		0.000		0.000		0.000
		(0.709)		(0.873)		(0.692)		(0.722)		(0.797)
Constant	-0.054	0.081	-0.052	0.082	-0.036	0.088	-0.069	0.076	-0.081	0.070
	(0.224)	(0.136)	(0.258)	(0.135)	0.423)	(0.106)	(0.114)	(0.159)	0.067)	(0.199)
N	5175	4703	5175	4703	5175	4703	5175	4703	5175	4703
F-Stat	9.35***	11.75***	10.15***	11.63***	9.65***	11.85***	8.77***	11.73***	9.56***	12.12***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
R-Squared	0.02	0.03	0.02	0.03	0.02	0.03	0.02	0.03	0.02	0.03

Chapter Five: The Power Of The Press: UK M&As

Extensive literature has noted the importance of the media in both predicting and explaining investor behaviour and stock market returns (Barber and Odean, 2008; Da et al., 2011; Tetlock, 2007; Tetlock et al., 2008; Tetlock, 2011). This chapter marries together the approach of these news-based empirical examinations with UK merger and acquisition (M&A) announcement and long-term returns, to our knowledge for the first time. We examine those firms that have media coverage of their M&A announcement versus those that do not. Those firms that do have their M&A covered in the news earn significantly better returns than those firms that did not have news coverage surrounding their M&A announcement. This leads us to suggest that no publicity is bad publicity for bidding firms, supporting the findings of Barber and Odean (2008) that investors buy those stocks that have caught their attention.

5. Chapter Five: The Power of the Press – UK M&As

"Rational traders make decisions on the basis of news (facts, forecasts, etc.). Noise traders make decisions based on anything else."

Richard H. Thaler (1993: xvii)

The mass media plays a pivotal role in the dissemination of information to broad audiences on a daily basis. The Office of Fair Trading reports that newspapers are delivered to approximately 54,000 retail outlets across the UK everyday reaching some 24% of the UK adult population[23]. While there has been a 36% decline since 1997 in printed sales of the major UK newspapers, this has been countered with a rise in online subscriptions. The scale of information dissemination via printed and online mass media is larger than most other sources, such as corporate analyst reports, while the speed at which it is published arguably can help shape the way in which investors act upon it. It is easy to understand the growing trend in the academic literature to assess the impact of the media upon stock markets (see for example Dyck and Zingales, 2003; Tetlock, 2007; Tetlock, et al., 2008; Fang and Peress, 2009). This chapter contributes to this growing field of research by analysing the impact of mass media coverage, as well as it's tonal content, upon acquiring firm returns in merger and acquisition transactions (M&A hereafter).

Classical economics writes that individuals are rational decision-makers who utilise all information at their disposal to make sound and unbiased investment decisions. Adam Smith in his seminal work *The Wealth of Nations* wrote that investors have an incentive to undertake considerable due diligence for without truly knowing what you are buying, then you will face additional risk that can and should be eradicated. This due diligence is modelled to remain consistent regardless of macroeconomic conditions for the incentive should be permanently present. Despite this logic, history provides countless bubbles, such as the Dot.com bubble in the late nineties as well as the more recent credit crisis in 2008 and sovereign debt crisis throughout the EuroZone in 2010, which together suggest less than rational decision-making. Certainly in the case of M&As the world has been witness to a plethora of evidence indicating that managers fail to undertake sufficient due diligence. An example can be found in the HP-Autonomy

[23] Data sourced and calculated from the Office of National Statistics Census 2011 reports, as well as from reports via the Audit Bureau of Communications from 1997 onwards.

acquisition that hit headlines in 2013 when shareholders launched legal action following a $8.8bn write-down of HP's value related to the purchase explained as a direct result of '*cursory due diligence on a polluted and vastly overvalued asset*' (Garside in The Guardian, 2013).

Despite evidence indicating less than rational economic activity, there have been a number of technological advancements that have reduced the costs of obtaining information to minimal levels while the speed at which we receive news updates has become increasingly faster with mobile apps and social media constantly updating us on news developments. Investors are bombarded with a wide range of sources delivering a multitude of opinions. For an individual charged with the task of selecting which stocks to buy from the whole investable universe, the decision can be daunting. It is here arguably where the mass media can aid investment decisions through pre-filtering stocks of potential interest. An individual without the vast resources to acquire, obtain and screen all investable assets, can focus on those stocks that mass media have pre-determined as stocks of interest. The reliability of the printed word and the prestige of news brands such as The Guardian and The Independent, many feel they can trust the information reported, more so than if they were to read the same news on a lesser known internet blog. Thus stock returns can potentially be viewed as being at the hands of multiple editorial teams, whereby mass media can be plausibly linked with stock markets through the attention it delivers to chosen firms.

In a M&A context, acquirers have been persistently shown to underperform in the long-run, with a prevailing debate over whether this is due to poor inadequate methodology (Fama, 1998) or is a direct result of wealth destruction on a massive scale (Shleifer and Vishny, 2003; Harford, 2005; Petmezas, 2009). Given the unanswered question of whether firms initiating M&As win or lose, this chapter adds further evidence to the debate through assessing the role of mass media in acquirer returns. To my knowledge this chapter is the first to undertake such research and indeed the first to find evidence that acquirer returns are in fact influenced by mass media in both the short and long run.

To reach these results, media coverage information is first downloaded for all listed UK firms spanning from 1989 to 2008 from the media database LexisNexis UK. The media analysed is articles from sources defined as major UK publications as filtered by the database itself, using supply and sales of the tier one UK newspapers and magazines. This sample is then matched to a M&A sample downloaded from Thomson One Banker for the sample period from 1990 to the end of 2008. This chapter then uses a combination of the methodological approaches of Tetlock (2007), Tetlock et al. (2008), Fang and Peress (2009), Loughran and McDonald (2010) and Garcia (2013) to classify the level of media coverage for each acquirer for up to twelve months before the M&A announcement, as well as the general level of pessimism within the coverage found.

The findings show that a portfolio of acquirers which have media coverage prior to the announcement of a M&A deal earn statistically significant lower announcement returns than those within a portfolio of acquirers that are not covered in tier one media – some -0.45% (0.053) lower - while this is reversed over the longer term with statistically significant lower losses - some 29.88% (0.000) better - for acquirers covered in the media providing a statistical long-term positive effect for shareholders of acquirers covered by the media. Moreover, cross-sectional analyses reveal that the level of pessimism of the content of said media is positively related to acquirer returns over a thirty-six month period implying that the stronger the pessimism of the media coverage prior to the announcement, the better the long-term returns suggestive of price pressure in the short term that is corrected over a three year period.

There are two major hypotheses provided by the existing literature as to why these results could be the case. First, Fang and Peress (2009) argue that impediments to trade for no-media stocks can lead to profitable opportunities existing in the market due to liquidity-related problems in the trading of stocks. This effect would be most prevalent for small stocks for example, or those with low analyst coverage. Second, Merton (1987), and later Barber and Odean (2008), propose the investor recognition hypothesis as an alternative explanation for the role mass media plays in stock markets. The idea is that investors, charged with deciding which stocks to buy from all that are available for selection in the whole investable universe, choose those which catch their attention and filter onwards according to investment strategy preferences. In a M&A setting, this would infer that media coverage of an acquirer places the firm into the buylist of an investor who then filters according to trading preferences (i.e. value-based, fundamentals, etc.). Therefore the mass media can play an important role arguably for enhancing the liquidity of stocks by highlighting the firm as an investable option. The returns of the portfolio of acquirers covered in the media therefore should be better than the portfolio of no-media acquirers due to better information and awareness of each firm.

The results of the media coverage analyses indicate support for both hypotheses. Small acquirers outperform large acquirers in the media portfolio by 1.62% (0.000) in the short-term and 17.23% (0.031) over a thirty-six month post-announcement period. Moreover, there are also statistically significant negative returns for large acquirers in the media portfolio relative to those in the no media portfolio of -1.02% (0.001), reversing to 19.73% (0.000) in the long term. The media effect is stronger for smaller stocks over the long term however with an outperformance of 48.41% (0.000). These results are consistent with Fang and Peress (2009) and the impediments to trade hypothesis. Moreover, the awareness of acquirers covered in the media portfolio leads a short run underperformance relative to acquirers in the no media portfolio by 0.45% (0.053) at announcement, which also reverses long-term where we see a statistically significant outperformance of 29.88% (0.000). In this way, the results related to media coverage indicate support for both hypotheses, supportive of Fang and Peress (2009: 2024) who conclude that the '*media effect is rooted in a Merton-type information story, and liquidity constraints help perpetuate the phenomenon*'.

The second contribution of this chapter relates to the effects of the tonal content of the media coverage on acquirer returns. The investor sentiment literature indicates that there are a number of variables that can influence an individuals mood and cause changes in their decision-making. Related studies such as those from Dichev and Janes (2003), Yuan et al. (2006), Kuo et al. (2010), Thaler (1987) and Frieder and Subrahmanyam (2004) all show significant relationships between, for example, the lunar moon cycle, religious holidays and the month of January with stock returns. Indeed investor mood can be altered by many variables and most literature finds mood to be an important determinant of investor returns. Tetlock (2007), taking heed from this growing trend, analysed the influence of the media content and specifically the language and terminology used of mass media upon stock markets by creating a pessimism factor, further amended and developed by Garcia (2013). This process uses the financial dictionary of Loughran and McDonald (2010) to count the number of negative and positive words in an article, and then defines its level of pessimism through taking the difference and scaling by the total number of words. Tetlock (2007) and Tetlock et al. (2008) find evidence that the tonal content of broad mass media is related to stock market returns on a national level.

The media attitude of the written coverage of acquirers is analysed in this chapter using a combination of the approaches of Tetlock (2007), Tetlock et al. (2008), Loughran and McDonald (2010) and Garcia (2013). The pessimism factor is created for each firm by subtracting the number of positive words in each article from the number of negative words, then scaling by the number of words in total in each article. A time series of the media attitude is then established for each acquirer by combining all articles together. The overall attitude of the sourced tier one media coverage of acquirers is then calculated using up to a twelve-month pre-announcement window that is shortened to a one month pre-announcement window and a six-month pre-announcement window for robustness.

The pessimism factor is analysed in a cross-sectional analysis. The results show that the attitude of the media plays no role in the short-term returns with no statistical relationship found. When modelling long run acquirer BHARs however, there is a statistically significant positive relationship found between acquirer returns and the level of pessimism. This indicates that the stronger the pessimism of the media covering the acquirer in the pre-announcement period, the higher the long-run returns, potentially indicative of short-run price pressure and uncertainty leading to a better long-run performance.

Overall, this chapter contributes to the existing literature by finding evidence that the media exerts a statistically significant effect on acquirer returns in both the short and long term. While it is recognized already that information dissemination is crucial for a firm’s cost of capital and stock returns, the previous literature has not assessed the role and effects of mass media as a distributor of information in a M&A setting. The results indicate that acquiring firm managers would best serve shareholders over the long run by undertaking a consistent PR pre-announcement campaign to place their firm in investors' minds.

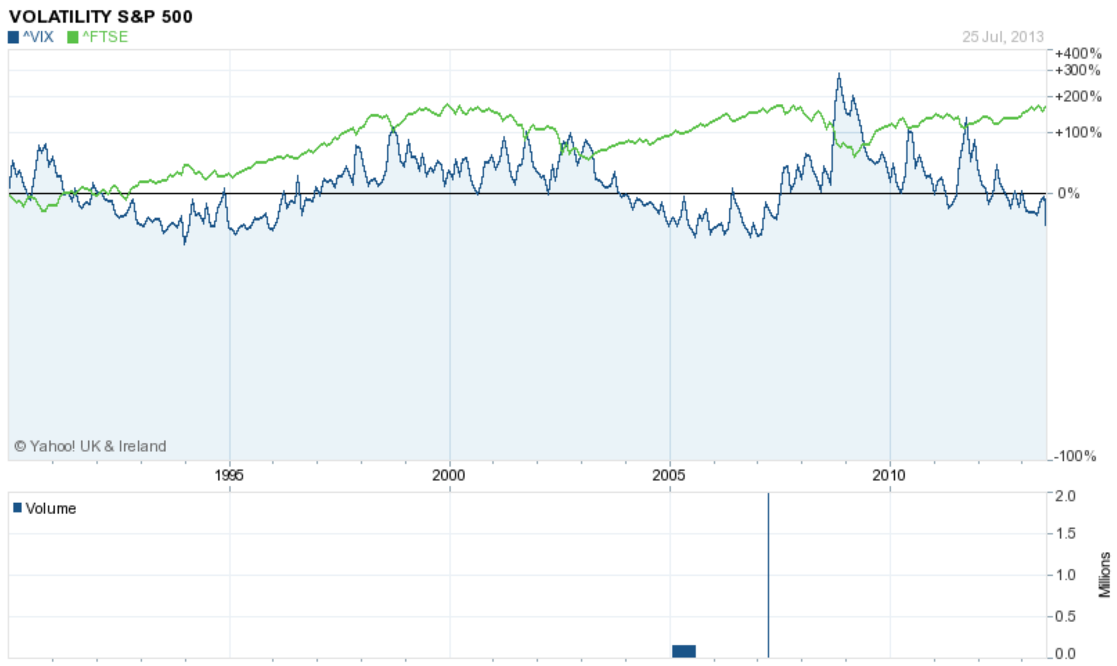
The remainder of this chapter is structured as follows. Section 5.1 reviews the existing literature before Section 5.2 describes the data and methodology followed. Section 5.3 presents and discusses the univariate and cross-sectional results. Section 5.4 concludes.

5.1. Literature Review

5.1.1. Classical Economics

It was John Maynard Keynes in 1936 who first introduced the notion of what he termed *animal spirits*. This concept proposed that individuals suffer from their emotions when making decisions, primarily in the perception and tolerance of risk. The premise is that decisions today are made based upon predictions and assumptions of the future price evolution of assets, something that is in reality unknown. Irrespective of the fact that managers and investors alike cannot be sure of the value of an asset in ten years' time, they will still choose to buy or sell it today. Keynes said that in these situations, it is animal spirits that govern the decision – that is an individual's *gut feeling* or intuitive expectation. When applied to stock markets this arguably helps to explain the cyclical nature of markets. When animal spirits are high, investors can become overly optimistic or overly pessimistic evoking increased *buy* or *sell* volumes in tune with market upturns or downturns respectively.

Figure 3: Volatility Index of the S&P compared with the FTSE100



The 2008 and 2010 financial crises have reignited the debate over the importance of animal spirits. Robert Shiller (2009) recently wrote that '*people's economic moods are largely based on economic stories that people tell each other that are related to the economy*'. We have repeatedly witnessed evidence of this in stock markets worldwide. For example, the view that a government would be unlikely to default on their debt lead to the collapse of Long-Term Capital Management when Russia defaulted in 1998. In the late nineties, we also watched as the Dot Com bubble created a plethora of millionaires younger than thirty years old as individuals hypothesized about the future in a newfound internet age. These bubbles and crashes appear to be a repetitive trend and the 2008 crisis has highlighted the importance of trying to establish a modern economic theory that can allow for the inclusion of animal spirits. Their impact on stock markets can be seen in Figure 3 with the graphical representation of the CBOE volatility index, known as the VIX. Spikes in the late nineties, as well as following the 2008 crash can be seen to have a negative impact on stock markets, even internationally into the FTSE 100 due to increasing financial market integration and thus greater risk of contagion worldwide. The importance of confidence has been reinforced by Shiller (2009) who argues that the economic crisis of 2008-2010 was a direct result of using an out-dated economic theory that fails to allow for the importance of animal spirits.

It is not as easy however to disregard the classical underpinnings of economic and financial thought. The classical school of economics was built upon the foundations of Adam Smith's seminal work *A Wealth of Nations* in 1776. This theory promoted that markets are stable such that if individuals rationally pursue their own economic objectives then the market will naturally exhaust all mutually beneficial opportunities for trade (Shiller, 2009), which was socially beneficial as it was theorized to lead to full employment as each individual rationally pursues his or her own economic objective(s). If there ultimately is no demand for the pursuit followed, then the laws of demand and supply would govern that the pursuit would adapt and change. The view that markets will be stable reinforced the view that rational agents should warrant that they undertake sufficient due diligence to ensure they hold a full understanding of what they are buying and selling and the respective intrinsic valuation.

In 1965 and 1970, Eugene Fama refined Smith's work into three forms of rational behaviour which he termed forms of market efficiency. In the first form – termed weak-form market efficiency – current prices should reflect all past information. In the second form – termed semi-strong market efficiency – current prices should reflect all past information as well as all publicly available information. Finally, in the third form – strong form market efficiency – current prices should reflect all past, public and privately held information. This would infer in an M&A context that a weak-form efficient market should see bidder and target prices reflecting all previous bids and announcements, a semi-strong efficient market should include all current information held publicly regarding any announcement made regarding a prospective merger, while a strong form efficient market should see the bidding and target firm stock prices changing as soon as the two firms privately begin negotiations.

Classical economics infers that due diligence should remain consistent regardless of these different market conditions, however, the 2008 financial crisis is a clear example of a failure for the undertaking of sufficient due diligence. Individuals bought and sold products – such as collateralized debt obligations and mortgage-backed securities - that they lacked an understanding of. The separation of the individuals charged with the task of ensuring that those borrowing money for mortgages (i.e. debtors) could repay them, from the ultimate owners of the mortgage itself (i.e. the creditor) as mortgages were packaged up and sold on, meant that the incentive for due diligence was absent consequently causing individuals to behave less than fully rational.

When applied to mergers and acquisitions we see repeated evidence of managers also failing to truly know what they are buying, and indeed what they are paying for, with high premiums and wealth destruction being the result. Moreover, some sellers fail to sell out even when it is rational to do so because of valuing their company at a level too high for market prices, which can also damage shareholder wealth. The HP-Autonomy acquisition hit headlines in 2013 when shareholders launched legal action following a $8.8bn write-down of HP's value related to the purchase as a result of '*cursory due diligence on a polluted and vastly overvalued asset*' (Garside, 2013).

Classical economic theory has failed to take into account this fact that buyers and sellers might not conduct due diligence as hypothesized. Indeed some assets can prove vastly difficult to derive a fair value for and so people can mistakenly buy/sell at inopportune levels. Yet most modern investment is still modelled upon rational behaviour. This chapter will analyse the modern day role for *animal spirits* by assessing the impact of media exposure and media attitude upon the returns generated from bidder and target stock prices.

5.1.2. A Short History of the Media

While media publications can be traced back to 4000 BC, the true extent of their influence is becoming ever more apparent as time progresses and technology advances. Since 2000 onwards the media has become an integral part of decision making in people's lives, providing information for major news events identified as important by editorial boards across the world (Dyck and Zingales, 2003). Mass media occupies an institutional role in modern society in the production and dissemination of information regarding *novel developments* (Petkova et al., 2013). In this way, mass media directly controls what information becomes widely available and indeed in what manner it is distributed.

Petkova et al. (2013) in the communication literature identifies that the media *functions as an information intermediary* that serves to filter through the abundance of information that becomes available to then select a relevant subset of events that are deemed to be important and of interest to a large percentage of the population. This role ensures that public attention becomes focussed on certain issues such that the mass media directly shapes the cognitive patterns and beliefs of its readership.

The rise of advanced technologies that have led to online replications of news publications have shortened the time that it takes for information to be globally disseminated. Scheufele et al. (2011) notes that an efficient market – i.e. one in which market prices fully reflect all available information – is only efficient in relation to specific subsets of information – i.e. past information, publicly available information, and privately held information. Mass media serves to distribute publicly available information to the masses, while journalists are perceived to be a catalyst that can facilitate the transmission of information from the privately-held to publicly held sector.

Historically, this transmission has been somewhat delayed. The printed media has served to distribute information, but has done so usually with a one-day lag given the requirement to write the articles and then publish it in the daily edition of the newspaper. As time progressed, some publications, particularly local newspapers, began to publish evening editions so as to distribute information somewhat faster in a summary of what had taken place in that day.

In a report discussing the supply chain of newspaper and magazine distributions, the Office of Fair Trading reported that in 2007, circa 14 million national newspapers were delivered to around 54,000 retailers across the UK on a daily basis, even hitting small and remote locations such as in the highlands of Scotland. The report highlights that the newspaper industry delivers a highly perishable product. An excerpt of the supply chain process is provided here:

> *The newspaper industry handles a highly perishable product. Publishers print newspapers as late as possible so that the latest news can be included, particularly if there is a late breaking story or an evening football match on which to include a report. Deliveries are made to retailers*

in time for their opening so that, for example, they can be delivered to customers' homes before breakfast or purchased by customers on their way to work. The majority (70%) of newspapers are purchased before 10:00 and those copies left unsold at the end of the day are effectively worthless. This means that distribution has to take place within a very tight time frame. Newspapers are typically printed between 22:30 and 03:00, delivered to wholesalers between around 03:00 and 04:00 and delivered to retailers between around 05:00 and 07:00.

Source: The Office of Fair Trading (2008: 29/30)

The development of the internet from the mid-nineties to the present day has seen the dissemination of information alter this supply chain such that readers can receive news updates at a much faster pace. Whereas before 2000, individuals would have time to absorb information that had occurred the day before, post-millennia has seen these articles becoming available almost instantaneously online. This has led to a 36% decline in the sales of printed media but has promoted sales of online subscriptions and news notification services. Moreover, the rise of social media with Twitter and Facebook has allowed for market updates to filter into the public sphere at an even quicker pace with short headlines hitting users before a full article has even been wrote. Arguably, because information is freely available for most developed nations at a very rapid pace, individuals are having to make decisions at a much faster pace to try to position themselves to weather the potentially ever-changing market conditions. In this light, markets have become increasingly volatile and ultimately are being governed less by rational fundamentals, as was once outlined by the Efficient Markets Hypothesis of Fama (1965, 1970), and more by market sentiment (Swarup, 2013).

Instead of firms being able to keep a tight handle on their affairs, in the modern age customers, employees, managers and investors can instantly cause extreme price movements through posting on message boards, Twitter, and Facebook. Markets, once driven by fundamentals and information that reflected changes in fundamentals, have increasingly become driven since 2000 by sentiment-related variables. A recent example saw stock markets dive on the announcement from Bernanke in the US regarding potential withdrawal of Quantitative-Easing under certain conditions, even though markets are a long way from meeting those conditions.

Blood and Phillips (1995) examine in the communication literature the impact of economic news coverage, public perception of the state of the economy (i.e. consumer sentiment) and the actual state of the economy with Presidential popularity. The study uses headlines taken from periods of recession as published in the reputable number one US publication, the New York Times to proxy for economic news. The results indicated that headlines focussed on the recession exerted a significant influence on consumer sentiment. In discussing their results, the authors draw notice to the concept of media malady – the idea that the media, by focussing on economic recessions, had been a key factor in the prolonged downturn in the economy as well as the loss of George Bush to Bill Clinton in the Presidential Elections. This example serves as an illustration of the interdisciplinary importance of the media, including both politically and economically.

This literature review will progress by discussing deeper the role of the media in stock markets before analysing its application in the financial world. Previous studies examining the impact of media coverage on stock prices will then be critically analysed before the research questions of this chapter will be stated.

5.1.3. The Media and Stock Prices

Existing evidence has indicated that there may be a link between the content of news with investor psychology and sociology (Tetlock, 2007). However, the evidence is mixed regarding exactly whether this media *induces, amplifies, or simply reflects investors' interpretations of stock market performance* (Tetlock, 2007: 1139). The known presence of *animal spirits* has led many researchers to try to decipher what it is that can influence an investors' emotion and lead to less than rational investment decision-making.

Black (1986) distinguishes that it is the presence of 'noise' trading rather than 'information' trading which causes stock prices to move away from fundamentals. He rightly asserts that in financial markets for trading to occur, and thus for liquidity to be present in the market, two individuals with opposing views of the market must agree to trade. What he means is that if an individual decides to trade based on information they have acquired in the market regarding a potential dividend increase for example, and thus decides to buy more of a stock they hold to benefit, then to do so, they must find a holder of this stock who does not share the same view that this dividend increase will come to fruition. In this situation, one of these individuals must be wrong. There is a binary choice that either the dividend will increase or it will not, but at that point in time, we are unsure of the outcome and thus the trading would be classified as noise. Black (1986) writes that it is the differences in beliefs that drive trading and thus stock prices, but that these differences must stem from differences in information. A rational individual who is aware of this must realise that trading should not be instantaneous to their special piece of information as they cannot be sure of its value relative to all information held across various individuals. If this were to happen, then there would be virtually no trading which would render financial markets essentially illiquid. Instead, individuals are willing to trade on their own objective point of view even though they would be better off not trading at all.

Tetlock (2007), studying news content from the Wall Street Journal's 'Abreast of the Market' column, distinguishes noise traders as one of the channels through which investor sentiment can affect stock prices. Noise traders in Tetlock's paper are identified as those who hold random beliefs about future dividends. On the other side, there are rational arbitrageurs – those Black (1986) would probably identify as information traders – who hold Bayesian beliefs. Tetlock argues that the difference in expectations of these two groups can be identified as sentiment, such that if noise traders hold beliefs about future dividends for example that are below those of rational arbitrageurs, then this would be reflective of pessimism and vice versa. Following this trail of thought, Tetlock (2007) finds that high media pessimism does indeed predict a short-term downward pressure on stock prices which is followed by a reversion to fundamentals. Moreover, in periods of high or low pessimism, there is a significant relationship with extreme market trading volumes, consistent with the sentiment model of DeLong et al. (1990).

One of the earliest studies known to link together the media with stock prices was undertaken by Cutler et al. in 1989 following the stock market crash of 1987. Their work was motivated on the *apparent absence of fundamental economic news coincident with the dramatic stock market* *movements of late 1987* (Cutler et al., 1989: 56[24]), on the back of the general debate regarding academic failures to substantiate the claim that it is only the arrival of new information into the market that can affect asset values.

Focussing therefore on the role of economic news and stock price movements, Cutler et al. (1989) split their investigations into two sections – the first assesses the relationship between stock returns and the arrival of macroeconomic information, while the second assesses the relationship between stock market reactions and identifiable world news. The findings, from a sample spanning 1871 to 1986, indicate support for the influence of macroeconomic indicators - such as inflation, interest rates, industrial production and so forth – on stock returns, but fail to show any significant relationship between the *qualitative* content of identifiable world news with stock price movements. Indeed, they highlight that in periods in which the stock market experiences its largest movements, there was no major world news released. Thus, the authors conclude that it is macroeconomic innovations rather than economic news which drive stock returns. Chen, Roll and Ross (1986: 383) delve further into what macroeconomic innovations actually influence stock prices and highlight the significant impact of the *spread between long and short interest rates, expected and unexpected inflation, industrial production, and the spread between high- and low-grade bonds.*

The progression of academic explorations into the role of the media has been built upon the basis of analysing whether the media does have an impact on stock prices and if it does, why it would be the case. In a comprehensive study undertaken by Dyck and Zingales (2003), they examine the impact that the reporting of earnings announcements from firms in the media upon those firm's stock prices. The paper finds evidence of a statistically significant impact upon the type of earnings reported – i.e. GAAP or "street" earnings – and stock prices, with stronger effects felt in situations whereby the firm is followed by fewer analysts as well as when the reporting takes place in credible media outlets. Following the finding that media coverage of a firm's earnings announcement does indeed have an impact on the firm's stock price, the author's then progress to discuss why this relationship should be apparent, providing several potential reasons.

[24] Cited in Bernstein and Fabozzi (1998).

First, it is important to acknowledge that there are indeed still limits to arbitrage. Classical economics writes that should prices deviate away from fundamentals, then arbitrage to capitalise on profitable opportunities would push assets back towards their efficient levels. However, there are still barriers to arbitrage in the fact the number of informed people can vary in relation to gaining access to the relevant information which would highlight the existence of an arbitrage-able price discrepancy. In this situation, the number of informed people, and indeed the number of informed people with the financial wealth or backing to be able to exploit the inefficiency can mean that the media serves an important role in highlighting its presence.

Second, finding and deciphering which information is relevant and tradable can be difficult and time consuming. Even in a world of rapid dissemination of information online, actually searching for relevant special news items can be difficult. In this way, the media can have an influence on stock prices by highlighting relevant news items which the editor has pre-deciphered as being important pieces of information.

Third, another key point to note is that while the internet has vast sources of information, even if a computer-literate individual was able to search and unearth their own information sources, the credibility of this can be questionable. To read a random persons advice on a message board or something similar over whether to buy or sell can be classified as nothing greater than noise trading. The media on the other hand provides credibility to the news that it covers. A story published and discussed in the Financial Times or The Guardian holds more weight than the same story published, even if published earlier, on someone's internet blog.

Finally, the media can have an impact on stock prices through the fact that the information it reports is available for all and thus provides a baseline level of common knowledge. Individuals who read the articles produced in the printed media can be sure that others who read the same article will hold the same information set as them. This can add more strength to trades executed on the back of its predictions or sway.

Dyck and Zingales (2003) find that the impact of printed media coverage is stronger when investors have relatively fewer other information sources. They proxy for the availability of information sources using the number of analysts that are following the company. They find that this does have a significant impact such that the fewer the sources, the greater the influence of printed media. This is also enhanced by the credibility of the media source itself, i.e. whether we are concerned with the reputable Financial Times or the predominantly-gossip based Daily Star for example.

While the coverage of the media itself has indeed been highlighted as an important variable, the content of how the information is conveyed is also of relevance. Dyck and Zingales (2003) find that the media spin of the event is correlated with the spin of the company. There are two main explanations for the spin of the article in the media. The first is that the view that the media is providing a public good – i.e. that it has a responsibility to report the most relevant, credible pieces of information in an unbiased and balanced manner. The second takes a less than positive view of the media role, and suggests that journalists have their own incentives to satisfy when gathering and diffusing information to the public. These incentives can bias the production and lead to overly optimistic reports if for example the source of the news is from inside the company (so that the journalist can retain access to receiving more information in the future) or indeed can lead to journalists producing what they believe the reader wants to read – i.e. writing commentaries in line with the readerships predisposed beliefs. For example, the Daily Mail is well known for publishing articles that will appeal to its largely Conservative readership[25]. Finally, there can also be the situation whereby the journalist is too lazy or incompetent to form his/her own opinion and so simply reports the article in the same manner as the company's press release without checking its validity or value.

In the communication literature, Scheufele et al. (2011) note that the media serves as a *seismograph* used by professional investors to try to predict the behaviour of inexperienced small investors that are perceived to follow the press. The framing, or spin, of the company in the mass media is believed to be a powerful tool that can predetermine the decisions of small investors who predominantly rely on the mass media as its major source of information. The authors

[25] Taken from a MORI survey in 2010 that showed that 59% of Daily Mail readers voted for the Conservative party in the UK General Elections.

proceed to analyse and discuss the relationship between the media and stock prices. They find that media coverage does not necessarily shape stock prices, but rather reflects the information they hold. In their work, there is no evidence of widespread media having any significant impact upon the stock prices, and they explain this as probably being due to media not having the same impact on enough investors. While the authors acknowledge that there could be a relationship present, they reiterate that the set of relevant investors worth studying coupled with the role of the media and its level of coverage will differ over time and thus if no relationship is found then it could be that at that point in time, the trades were simply not large enough to warrant a significant price movement. Indeed, it is true that the sociopsychological channels of processing information are difficult to clinically identify and as such we can only estimate their impact on *results* rather than their *pre-decision* impact.

Fang and Peress (2009) also highlight the time lag that is present in mass media and indeed the fact that research can only truly assess the resultant effect rather than the cause. Indeed they write that because of the delay in getting news articles to print, it is unlikely that the news sourced from printed mass media can actually be viewed as genuine news. But this does not mean that the media cannot have an impact. Indeed, while the news itself may not be 'new', because of the nature of limits to accessing and processing all information, it could be 'new' for the reader such that mass media still can have an impact through its sheer dissemination of that information to its readership.

Studying the US market, Fang and Peress (2009) report that there are 55 million newspapers sold to individual readers, reaching circa 20% of the population. Moreover, with the existence of many online subscriptions it is indeed apparent that the breadth of readership is likely to be even greater. Because of the vast readership of mass media, Fang and Peress (2009) argue that it is logical for there to be a relationship between mass media and securities markets. They intuitively examine this relationship via the construction of two main portfolios in which one holds stocks that are covered in the media, and the other contains stocks that are not covered in the media. The results indicate that the no media portfolio returns 3% greater returns that the portfolio which holds stocks that are covered in the media. This outperformance is shown to be more pronounced for stocks that are small as measured by the company's market capitalisation, for stocks that have low analyst coverage, for stocks mainly owned by individuals and for stocks that exhibit high idiosyncratic volatility. In these scenarios, the no media premium can rise up to between 8% and 12% per year.

There are two explanations for this outperformance provided by the authors. First of all, they argue that if the stocks not covered by the media serve as a reflection simply of some mispricing, then the premium could reflect severe impediments to trade that can evoke some type of liquidity related phenomenon. Second, they discuss the investor recognition hypothesis first presented by Robert Merton in 1987. This hypothesis says that because markets are informationally incomplete, investors cannot be aware of all stocks that are available for inclusion in their portfolio. Therefore, stocks that have a lower recognition should provide higher returns so as to compensate holders for incomplete diversification. In this manner, the media serves as a tool to increase investor recognition, such that those stocks covered in the media can be viewed as needing to offer a lower return than those without media coverage, hence explaining the so-called media premium. The paper concludes by reinforcing that mass media can help to alleviate market frictions with the primary role and influence lying in the breadth of information dissemination.

The idea that investors purchase those stocks that catch their attention has served as the basis for a number of publications undertaken by Brad Barber and Terrance Odean. Odean (1999) wrote that while there is indeed a limited choice for investors in relation to stocks that catch their attention, which stocks they then choose to buy will depend on the characteristics and strategy being followed by each individual investor. For example, out of the universe of investable stocks, investors will be limited to those that catch their attention to create a subset. Then, out of that subset, investors will choose stocks for inclusion in their portfolios based on indicators they generally are following such as momentum, contrarian, and so on.

In 2008, the two authors undertook a comprehensive study on the decisions of investors primarily when buying stocks. The motivation for this was the acknowledgment that in the decision to buy, individuals are mostly concerned with the potential for future returns from these assets whereas in the decision to sell, investors typically will sell only stocks that they already hold and will make that decision based on the past returns experienced. This would link in with prospect theory of Kahneman and Tversky (1972, 1974 and 1979), which outlines that investors are likely to sell stocks that are winners to realise the gain while delaying the sale of losing stocks so as to delay the realisation of a loss.

Barber and Odean (2008) focus primarily on how stocks can get an investors' attention, and then measure the trading performance of those stocks thereafter. The paper outlines three main measures that a stock has gained investors' attention. First, news coverage of the stock can place it in the minds of investors as a potential investment option. The premise here is that any event worthy of catching investors' attention is most likely to be newsworthy as well. Second, unusual trading volume of a stock could indicate that significant news has reached investors adjusting their beliefs and portfolio goals heterogeneously such that more trades take place than is usual. Finally, extreme returns could likely indicate an event that has caught investors' attention and has led to big price movements.

Using three proxies – the abnormal daily trading volume, the previous one-day return and whether or not a firm appeared in the news that day – the authors show that investors are indeed net buyers of those stocks which catch their attention. The authors reason that the reason for this is that investors have limits to the amount fo information they can process. With bounded rationality, individuals suffer from cognitive and temporal limits that prevent the ability for investors to rank the universe of stocks. And thus, investors do indeed buy those stocks which catch their attention.

Antweiler and Frank (2004) address the value and impact of the online arena in the relationship between media and stock returns. Using financial message boards from the likes of Yahoo! Finance, the paper examines whether or not message board postings relating to a stock can have an impact on the respective stocks' returns. The find that when there are many messages posted in a given day for a particular stock, then there is a significantly negative impact on the return in the following day. While statistically this relationship is valid, the authors do note that it is economically very small once transactions costs are accounted for. Nevertheless, message board posting are shown to help predict volatility and stock returns.

Moreover, the authors discuss whether or not disagreement within the threads on the message boards has any impact. The motivation for this is that two effects could occur following disagreement over whether to buy or sell. First, there could be the situation where trading is induced. People could become stronger in their assertions and disagreement can lead to increased trading – indeed, if there was no disagreement and all wanted to buy or sell simultaneously then liquidity would be diminished. Second, there is the possibility that disagreement could lead individuals to re-question their beliefs and to hold back from trading until they see what everyone else decides to do. This can ultimately lead to a reversion of market prices. The empirical findings indicate that disagreement leads to more trades with reversals found the following day such that trading volume lowers and market prices stabilise.

In recent years, there has been a growing trend to delve deeper into the relationship between the media and stock prices beyond simply whether or not the media catches the attention of investors subsequently leading to trading activity. Tetlock et al. (2008) examine the impact of the content of that media. They create a quantitative measure of the language content of articles published in the Wall Street Journal and the Dow Jones News Service in relation to firms within the S&P 500 between 1980 and 2004. Three measures[26] are employed to robustly analyse the impact of linguistic content of the media covering firms upon stock prices in terms of ascertaining how long it takes for investors to incorporate this commentary into stock prices. The study is motivated on the basis that it can be difficult for an investor to truly distinguish the impact of events upon stock prices, and thus the content of the media serves as a way to clarify this such that investors can utilise it to help impound the information into stock prices. In this way however it can be noted that the media holds significant power if indeed the content read is shaping an investors decision making process.

[26] Tetlock et al. (2008) use three measures to capture the sentiment of the media content covered. These include: a) the fraction of negative words in stories that are specific to the firm; b) the stock price reaction of the firm to the negative wording; c) the predictability of earnings and stock returns to the level of negative words in the content analysed.

Tetlock et al. (2008) find evidence that shows negative words do convey negative information to the market regarding the firm's earnings, exceeding that sourced from analyst forecasts or indeed from historical accounting data. Moreover, stock prices do react to negative wording in media coverage with a one-day delay. These results indicate that the linguistic content of the media covering a firm does exert a significant impact on stock prices. The authors argue that this is likely to be because the qualitative wording conveys information about the hard-to-estimate value of the firm's fundamentals.

From this vast literature surveyed, it is clear that there is indeed a relationship between mass media and stock prices. Its application to Mergers and Acquisitions will now be discussed.

5.1.4. Research Questions

There is extensive evidence that has suggested that there is indeed a relationship between stock prices and the media. Given this information, this chapter contributes to the growing findings by investigating the role of the media in a merger and acquisition setting.

As previously mentioned in the earlier chapters of this thesis, there is strong evidence of a negative long-term performance of bidders that engage in M&A activity. Findings from M&A studies have shown that bidders significantly underperform long-term with at best zero returns, i.e. a break-even. As a result, a persistent unanswered question remains: why do managers of acquiring companies continue to initiate deals that will not long-term generate significant profits?

The thesis thus far has examined the impact of long-term bidder performance using a sample of deals that failed for exogenous reasons as well as examining the impact of capital structure changes around the deal. The evidence remains consistent that while bidders can improve their returns by issuing debt before their deal, they still will negatively lose out over the long-term regardless.

Following on from these findings, this chapter looks at the role of sentiment in M&A acquirer returns. Previous studies have examined investor sentiment to transactions by primarily examining the effect of market conditions (Rosen, 2006; Bouwman, Fuller and Nain, 2009; Petmezas, 2009) and firm valuations (Shleifer and Vishny, 2003; Savor and Lu, 2009). To the best of my knowledge, none to-date have examined investor sentiment via the media in a M&A context. It is this gap which this chapter aims to fill.

The literature from media communication, finance and psychology have all indicated the importance of the media in society (Petkova et al., 2013; Scheufele et al., 2011; Dyck and Zingales, 2003; Tetlock, 2007; Tetlock et al., 2008). The first research question of this chapter examines the impact of the media coverage of a transaction upon bidder returns. Barber and Odean (2008) argue that a stock that catches an investor's attention can enter their opportunity set for selection for investment. The study shows significant evidence in support that investors do buy those stocks that catch their attention, as proxied using news coverage, trading volume and extreme returns. Moreover, Fang and Peress (2009) find evidence of a no-media premium whereby firms that are not covered in the media exhibit higher returns than those which are, reasoned as being due to the higher risk involved for an investor who has less information about the lower covered stock. The media is portrayed in these studies and those related to them as a valuable intermediary charged with the task of disseminating relevant information to the masses.

It is natural for this research to progress to analysing the impact of media coverage in an M&A setting. An M&A deal can be viewed as a catalyst event – it marks a new phase for a bidder and conveys information about the firm's prospects to the market dependent on the characteristics of the deal, i.e. method of payment, relative size, and so forth (Travlos, 1987; Petmezas, 2009; Shleifer and Vishny, 2003; Harford, 2005). One of the main channels for this information to be conveyed is via the press. Most firms, certainly those that are listed, will proceed with a public press release regarding their intention to acquire, and will follow this up with a subsequent success or failure notification. It may however be the case that the mainstream mass media does not pick up on this press release, dependent on the perceived significance of the transaction. For example, an acquisition of Royal Mail will be of great public interest while others may not. Editors therefore exert influence by deciding which deals are worthy of media coverage.

From an investment standpoint, as Barber and Odean (2008) have highlighted and shown evidence of, investors can only process a limited number of potential investable stocks – those which catch their attention. If the catalyst event – i.e. the M&A deal – does not reach them via mainstream media, then it would be their responsibility to follow this up independently and source this information on their own. The likelihood of the average retail investor doing this however is relatively low. The constraints of time, bounded rationality, and skill mean that it is unlikely that most investors will buy stocks other than those which are already pre-determined as of interest by editorial teams.

Thus, the question arises over how an acquirer performs when their deal is and is not covered in the media. As a natural extension of Fang and Peress (2009), it could be the case that coverage in the mass media will lead to high exposure and thus potentially lower risk and thus lower returns. On the other hand, an alternative explanation could be that coverage in the mass media can potentially exert a stronger disciplinary role for managerial teams. Those deals that are covered in the media will be important for managers to ensure that they are completing necessary due diligence procedures to avoid scandals as experienced by RBS following the ABN Amro fiasco, or the Hewlett-Packard billion-dollar writedown following the Autonomy acquisition. In this way, it may be that there could exist a media or a no media premium. The media premium could reflect better deals being processed while a no-media premium could reflect the higher risk for an investor who knows less information about the firm.

Thus we are led to the first research question of this study:

R1: What impact does media coverage of an acquirer during an M&A transaction have on the performance?

It is important to highlight a small grievance that could be apparent in regards to classifying a firm as having media relative to not having media. The concept of no media coverage in 2013 is difficult to truly validate. Just because the deal does not appear in the media covered or sourced does not mean that it was not covered anywhere. It could have been covered somewhere that did not enter our sample following our extensive searches. Thus instead of examining the impact of media and no-media, this chapter simply intends to examine the impact of mass media as proxied using the highest rated UK publications versus those that did not appear in those. In this way, we cannot be sure that the deals did not enter the media, just that they did not gain the mass exposure of those investigated such as the Financial Times, The Independent, and so forth.

The recent literature of Tetlock et al. (2008) has also built on the importance of the qualitative content of media as recommended from the media communication field, with the likes of Blood and Phillips (1995), Petkova et al. (2013) and Scheufele et al. (2011) all indicating the importance of mass media as an intermediary and an information disseminator.

Tetlock et al. (2008) write that *substantial movements in firms' stock prices do not seem to correspond to changes in quantitative measures of firms' fundamentals* which suggests that perhaps linguistic, qualitative variables could play an explanatory role. The study of Tetlock et al. (2008) reason that using qualitative media content allows for there to be less data mining given the limitless scope of the content as well as the fact that linguistic communication can be a stronger indicator of a firm's fundamental value.

Media content has been highlighted as an important determinant of sentiment in the communication literature since the sixties, and maybe within unsourced literature from before. Katona (1964), Curtin (1982) and Strumpel et al. (1972) have all shown evidence in support of the media driving consumer sentiment, which in turn can serve as an economic indicator to forecast future movements. Scheufele et al. (2011) write that the way in which the media frame an event can in fact predetermine related investment decisions due to the strong reliance that small investors place on mass media and what it reports. Petkova et al. (2013) support this highlighting that the media functions as an information intermediary that exerts influence over where public attention is placed which in turn can shape cognitive patterns and beliefs.

The impact of mood, or sentiment, on an investor has been widely accepted as having an explanatory role over the decisions that they make. Many variables have been used to capture the impact of mood upon an investors' decision-making process. Saunders (1993) showed that the level of cloud cover is significantly positively related to stock index returns in the US indicating that weather plays a key role in the mood of an investor subsequently affecting the decisions that are made. Related studies such as those from Dichev and Janes (2003), Kuo et al. (2010), Thaler (1987) and Frieder and Subrahmanyam (2004) all show significant relationships between for example, the lunar moon cycle, religious holidays and the month of January, with stock returns. Indeed, investor mood can be altered by many variables and most literature finds mood to be an important determinant of investor returns.

In the M&A literature, sentiment has been addressed in various ways. Firstly, mood was examined indirectly via market conditions. A plethora of literature has linked merger waves to market valuations. Rhodes-Kropf and Robinson (2004), and Rhodes-Kropf, Robinson and Viswanathan (2005) showed that the number of stock mergers undertaken is significantly related with high market valuations. Shleifer and Vishny (2003) claimed this was due to managerial attempts to exploit temporary overvaluation of stock, as promoted by Myers and Majluf (1984) and Travlos (1987). The quality of the acquisition was also shown to be linked to market-wide valuations by Bouwman, Fuller and Nain (2009) and later by Petmezas (2009), Antoniou, Guo and Petmezas (2009), Alexandridis, Petmezas and Travlos (2010), and Alexandridis, Antoniou and Petmezas (2007).

The second research question of this chapter examines the impact of the attitude of the media upon stock returns. Media content has been highlighted by the likes of Tetlock et al. (2008) as a useful proxy for investor sentiment. Therefore, this chapter examines whether the attitude of the media coverage of an M&A deal influences investors. The media coverage for each deal will be defined according to a level of pessimism, and the corresponding impact on bidder returns will be examined within a cross-sectional regression framework. Thus, the second research question of this chapter seeks to answer:

R2: Does the attitude of an M&A deal's media coverage have an impact on the acquirer's performance over the short and/or long-term?

5.2. Data and Methodology

5.2.1. Data

In order to examine the stock price reaction of acquirer's following the announcement of their M&A deal, the sample had to be compiled in relation to the characteristics of the deals themselves with the media coverage surrounding its announcement.

Media data specific to the individual acquirers was manually obtained from the news database LexisNexis UK. This media data was downloaded for the specification of top UK publications, as defined by LexisNexis, over the period 01/01/1989 until 31/12/2008. The respective sources include:

- City A.M.
- guardian.co.uk
- Independent.co.uk
- Independent on Sunday
- Evening Gazette
- telegraph.co.uk
- The Daily Telegraph (London)
- The Guardian (London)
- The Independent (London)
- The Observer
- The Sunday Telegraph (London)
- The Sunday Times (London)
- thetimes.co.uk
- The Times (London)
- The Mirror
- Daily Mirror
- Daily Post
- Sunday Mirror
- The People
- Western Mail
- South Wales Echo
- Wales on Sunday

These sources are chosen as they are viewed as a credible and reliable source of information (LexisNexis UK, 2013) providing in-depth discussions and commentary on both global and national levels. Given the nature of this study in terms of focussing on the investment decision regarding an acquirer's stock following the announcement of their deal, the Financial Times or FT (which also includes FT.com on the LexisNexis UK database) as well as The Economist is also included. PwC confirmed in 2011 that the FT enjoys an average daily readership of 2.2 million people globally with a further 4.5 million registered as users for the online edition at FT.com. Given the extent of its audience, coupled with its reputation as the industry leading publication for business and economic news, its reporting can certainly be classified as Tier One.

The data sourced from LexisNexis UK covered all UK companies listed on the London Stock Exchange. Individual HTML files were downloaded from the database before programming was used to extract the following information for each article and place it into Excel format:

- Primary Company Name (i.e. LexisNexis define the Primary Company as being the firm that has over 85% of the article related to it);
- Headline of Article;
- Number of Positive Words in Title;
- Number of Negative Words in Title;
- Source (i.e. Publication Name);
- Date of Publication;
- Length (i.e. Word Count);
- Number of Positive Words in Article;
- Number of Negative Words in Article;
- The Content of the Article

Table 61 provides summary statistics of the articles extracted. The media information downloaded comprised of 365,105 articles for 506 listed UK firms. The leading three publications were The Financial Times, The Times and The Guardian as would be expected given their prestige, history and reach, contributing 43.93%, 21.43% and 15.23% respectively to the overall media database. The articles spanned in length from 10 word bulletins to 999 words in length, and on average there were 476 words in each article. The articles were classified according to how many positive and negative words were in the title and within the content. It can be seen that there is more of a preference towards the inclusion of negative words in these articles, representative of the aforementioned media malady (Blood and Phillips, 1995).

5.2.2. Classifying the Media Dataset

An important element to explain is the classification of positive and negative words in both the title and content of each article. Loughran and McDonald (2010) correctly highlighted that previous studies had misspecified the tone of the text by misclassifying common financial terms in accordance with the Harvard-IV-4 TagNeg dictionary (HI4N). Terms such as *tax, cost, capital, board, foreign, liability* and *vice* (Loughran and McDonald, 2010: 36) were all included as negative words on the HI4N list even though in finance articles, vice-president, foreign target and so forth would not be considered to be financially negative.

This chapter uses the amended and updated Loughran and McDonald (2010) list to classify the number of positive and negative words in the title and content of each article. These can be sourced via Bill McDonald's personal website (http://www3.nd.edu/~mcdonald/Word_Lists.html) where a list of the Negative and Positive words is provided.

In order to classify the content of each article i written on day t according to the dictionary approach of Loughran and McDonald (2010), the number of positive words g_{it} and the number of negative words b_{it} was totalled for the headline title and within the article itself. The total number of words within each article, i.e. the word count, was defined as w_{it}. The media sentiment variable was then constructed for day t for each firm, although Garcia (2013) highlights that each article is typically written between 2.30pm and 6pm each day such that it would not be widely available until day $t+1$. Nevertheless, the information within each article pertains to day t and because this chapter does not aim to assess the predictability of returns but rather the effect of media sentiment on acquirer returns, then this is not considered as a mitigating factor.

The media sentiment variable aggregates g_{it} and b_{it} to create a time series for each firm. The end objective is to bring together all articles for each acquirer one to twelve months before the acquisition to get an overall sentiment score. For days t and $t+1$, the media content is defined according to Garcia (2013) as follows:

$$G_t = \sum_i \frac{g_{it}}{w_{it}} \text{ and } B_t = \sum_i \frac{b_{it}}{w_{it}}$$

Where the summation is over all articles written on day *t*. Given the criteria imposed, there is on average between 1 and 2 articles for each firm on any given day. This method essentially counts the number of positive and negative words respectively then normalizes each by the number of words. The pessimism factor P_t is then defined as the difference between B_t *and* P_t, as follows:

$$P_t = G_t - B_t$$

Once each article had information computed for the number positive and negative words in its title and content and the respective pessimism factors for each firm, the companies were matched with the details from the merger sample.

5.2.3. The Merger Sample

The merger sample was downloaded from Thomson One Banker SDC. A full sample for deals according to the following criteria:

- The deal must take place within the sample period 01/01/1990 until 31/12/2008;
- The acquirer must be a publicly listed UK firm that has at least 5 days (+2, -2) of return data around the acquisition announcement and 1 to 3 year return data for the long-term as sourced from Thomson DataStream;

- The acquirer owns less than 10% of the target's shares prior to the deal announcement and owns more than 50% post-completion;
- The deal must be successfully completed;
- The deal value is greater than US$ 1 million;
- The deal value is at least 1% of the market value of the acquirer (measured four weeks before the deal announcement) as below this level it is hard to justify any significant effect for the acquirer;
- Both acquirers and their targets are not financial or utility firms due to differences in regulation of these sectors.

Under these criteria, a sample of 3,648 deals is downloaded. This merger sample is then matched with the media dataset. Of the 3,648 deals, there was media information for 690 deals.

5.2.4. Combining the Media and Merger Samples

A point to make at this stage is that there is no pre-defined term as to how far back the media coverage should be taken. Because there is no paper that has been sourced which has examined the impact of the media around a merger event, personal discretion had to be used in this regard. For reliability and robustness, a number of windows were chosen. The Media sample was sub-classified as:

- Media (0,12) – this sample included deals where the acquirer had media coverage throughout twelve months prior to the acquisition. This was the overall media sample with 690 deals.
- Media (0,1) – this sub-sample included deals where the acquirer had media coverage throughout one month prior to the acquisition. This left 524 deals remaining.
- Media (0,6) – this sub-sample included deals where the acquirer had media coverage throughout six months prior to the acquisition. This left 672 deals remaining.

I did not classify a bidder that had media information beyond a twelve month period primarily because I felt that while it was plausible to argue that investors would remember articles that they read a maximum of one month ago, it was not so plausible to suggest that investor remember what they read one year ago. In this way, one year was deemed to be a long-enough window to show long-term persistent media coverage, and indeed media attitude, while short enough to argue some ability for investor recall of it.

Because the first research question was to assess the performance of acquirers with Tier One media exposure relative to those that did not have Tier One media exposure, the merger sample is stratified into two: *Media* which has 690 deals within it and *No Media* which has the remaining 2,958 deals within it. To clarify, the *Media* sample includes deals in which the acquirer had Tier One media coverage up to twelve months as defined earlier surrounding the acquisition while the No Media sample includes deals in which the acquirer did not have Tier One media coverage. This is an important clarification as in Fang and Peress (2009) it is assumed that *No Media* means literally *No Media* coverage. However, from my opinion, it can't be said that there was definitely no media coverage, simply that there was no media coverage in the publications sourced or the database utilised.

It was then necessary to classify both the media coverage and the sentiment of that media for each deal. Quite simply, the *Media* sample was stratified according to whether or not there were articles written about the acquirer in the media dataset downloaded. This then separated our univariate analysis into comparing the performance of the *Media* and *No Media* samples for the one, six and twelve month periods respectively. In addition, for the cross-sectional analysis, and additional variable related to the specific number of articles in each time period for each acquirer in each respective deal. In doing this, this chapter follows the definition of Fang and Peress (2009: 2027). In their study, they define the number of newspaper articles about a stock in order to proxy for the overall media exposure of the respective firm. This chapter did the same to classify the extent of media coverage and included this in the cross-sectional analysis as an additional secondary variable.

In regards to the media sentiment, it was mentioned earlier that the pessimism factor, P_t, was established for each firm. This process was repeated specific to the conditions of each merger. So for the sample Media (0,1) for example, the pessimism factor P_t was constructed for the one-month period for the bidder, such that each deal is left with one figure for its level of pessimism. This was respectively re-ran for the Media (0,6) and Media (0,12) samples. Because the variable takes the number of negative words minus the number of positive words, the deals were then ranked in each sample from highest to lowest values of P_t. The top 30% were then classified as Most Negative deals while the bottom 30% were classified as Least Negative. The pessimism factor was then inserted as an additional secondary variable in the cross-sectional analysis for examining the second research question of this chapter.

5.2.5. Methodology

After the two datasets were merged, it was then necessary to compute the returns over the short and long-term periods for the acquirers involved. This chapter follows an event study methodology as is commonly used within the existing literature, and has been used throughout this thesis, in examining M&A performance. An overview of the formulae involved will now be presented.

5.2.5.1. Short-Term Analysis

The short-term analysis follows the methodology of Brown and Warner (1980) and (1985) which is then complemented by Fuller, Stegemoller and Netter (2002) and Petmezas (2009). The event window is set one day before and one day after the merger announcement[27], denoted (-1, +1) while for robustness and to enhance the reliability, this is lengthened to two days before and two days after, i.e. (-2, +2), as well. For brevity, the three-day results are reported but the five-day results are included at the end of this chapter in Tables 87 to 122. They serve to confirm the major findings discussed.

[27] As sourced from Thomson One Banker SDC.

Abnormal returns are defined as anything earned above a normal return for the security in question. The null hypothesis under the efficient market hypothesis is that the catalyst event, i.e. the merger announcement, is fully incorporated into stock prices at the time of announcement leaving no room for profit to be extracted over the event window. The alternative hypothesis is that there is a statistically significant return, be that a gain or a loss. If the null hypothesis is rejected, then it indicates that there were statistically significant profits to be extracted from the arrival of information related to the M&A deal into the public sphere, which in turn would support market inefficiency.

To establish whether or not the market does react efficiently to the M&A announcement, a normal return for each acquirer should be established. The normal acquirer return is defined, under the modified market model, as the difference between the acquirer's return and the market's return on each day of the event window (Brown and Warner, 1980 and 1985; Fuller et al., 2002), denoted:

$$AR_i = r_i - r_m$$

Where r_i is the return for acquirer i and r_m is the return of the underlying market benchmark. In this paper, the FTSE Allshare is used as the benchmark as opposed to FTSE 100, 250 or 350 which have size biases incorporated within them. Following both Fuller et al. (2002) and Petmezas (2009), market parameters are not estimated using historical data before each transaction, and thus the alpha is assumed to be zero while the beta is assumed to be equal to one. Not estimating the parameters over an estimation window is reasoned as being due to previous takeover attempts perhaps being included in the calculations, which could reduce the significance of the estimates generated. Moreover, Brown and Warner (1980) show that for short-term analysis the inclusion of a firm's beta to weight the market return does not enhance the reliability or meaningfulness of the results generated.

For each event window, the abnormal returns are summated across the event day to generate the cumulative abnormal return (*CAR*) for each deal:

$$CAR_i = \sum_{i}^{n} AR_i$$

Where CAR_i is the cumulative abnormal return for acquirer *i*. The null hypothesis is that for each sample, there is no statistically significant CAR generated so that $CAR_i = 0$, i.e. the media does not have a significant impact on investors or indeed the market reacts quickly, within the event window, to the arrival of information related to the M&A. The alternative is that there is a statistically significant profit generated such that $CAR_i \neq 0$, i.e. the media does have a significant impact on investors or indeed the market reacts slowly to the arrival of information related to the M&A.

5.2.5.2. Long-Term Analysis

For the long-term performance of M&A's there are a multitude of methods that can be employed. The most popular are Buy-and-Hold Abnormal Returns (BHARs) and Calendar-Time Portfolio Returns (CTRs) following the papers of Barber and Lyon (1997), Lyon, Barber and Tsai (1999) and Fama (1998).

This chapter utilises the BHAR methodology. The main drawback of using BHARs is that Fama (1998) argues that statistical significance over the long-term can be found despite none being truly present due to short-term effects. Buchheim et al. (2001: 28) however write that the primary advantage of the BHAR methodology is that the *most accurately simulate the effect of an event on an investor's portfolio due to compounding*.

It should be noted that CTRs, while promoted as the more robust method, are not utilised in this study due to the small sizes of some sub-samples rendering comparisons difficult. It is acknowledged that this could produce more reliable results if the sample sizes were bigger over the time series.

The BHAR methodology measures the difference between the compounded actual return of the acquirer with the compounded expected or predicted return (Buchheim et al., 2001), such that:

$$BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$$

Where $R_{it}$is the time t arithmetic return including dividends for acquirer i and R_{mt} is the time t arithmetic return including dividends on the FTSE Allshare for the sake of consistency with the short-term analysis.

The event window for the long term is robustly analysed for one year, two year and three years' post-event. For brevity, the three-year results are reported but the one and two-year results are included in Tables 87 to 122 at the end of this chapter. They serve to confirm the results presented.

5.2.5.3. Cross-Sectional Analysis

While the short and long-term analyses indicate whether or not the market efficiently reacts to the parameters chosen, neither defines the relationship between acquirer returns and each individual parameter. For example, while the short and long term can identify that profits were able to be extracted or losses were incurred, the directional impact can only be assessed via cross-sectional regression analysis. Thus the final part of the analysis of this chapter models acquirer returns as a function of a number of notable deal characteristics.

Given the nature of this study, the primary variable assessed is the impact of the media coverage for an acquirer relative to no media coverage. The first variable, entitled Tier One Media Exposure takes the value of one for each deal in which the acquirer had Tier One Media Exposure as defined earlier, or zero otherwise. In addition, Fang and Peress (2009) define media coverage as the number of articles covering an acquirer. Thus the variable Media Coverage is also included which counts the number of articles that each acquirer had written about them during the respective periods of either one month, six months or twelve months prior to the M&A announcement. The final primary variables relate to the sentiment of the media coverage. The Pessimism Factor as defined earlier is included into the regressions to reflect the sentiment of the media covering the acquirer. This is labelled Media Attitude.

There are several secondary variables that are also included. The first relate to the number of positive and negative words in the titles of the articles covering the acquirer. The variables Positive (Negative) Words in Title count the average number of positive (negative) words as defined by Loughran and McDonald (2010) in the headline titles of the articles covering the acquirer over the specified windows. Moreover, the variables Positive (Negative) Words in Content count the average number of positive (negative) words as defined by Loughran and McDonald (2010) in the content of the articles covering the acquirer over the specified windows.

The existing literature has highlighted the importance of controlling for known anomalies (Doukas and Kan, 2004; Travlos, 1987; Fuller et al., 2002; Chang, 1998; Petmezas, 2009). These variables include binary variables that take the value of one (zero otherwise) if the deal is: financed 100% with Cash (Cash); the target is in an unrelated industry to the acquirer (Unrelated Target); the target is publicly listed on a stock exchange (Public Target); there is more than one bidder involved in the negotiation (Competed Offer); the target is domiciled in a country different to that of the acquirer (Foreign Target); the bid approach is hostile (Hostile Bid).

In addition to these standard variables, the following control variables are also included: the log of the acquirer's size defined as the market value of the acquirer as measured one month before the deal announcement (Ln(Size)); the relative size of the transaction defined as the deal value divided by the acquirer's market value, as measure one month before the deal announcement (Relative Size); the run-up stock return of the acquirer as measured over a window of -300 to -3 (Run-Up); and the time interval between the date of announcement and date of effective completion (Time Interval).

5.2.6. Summary Statistics

The summary statistics for the final sample are reported in Table 62. The statistics indicate that at announcement, acquirers without media coverage earn 1.05% (0.000) while those with media coverage earn 0.60% (0.000), both statistically significant at the 1% level. However, over the long-term, while acquirers without media coverage conform to previous findings with losses of -27.58% (0.000) on average, those with media coverage do not lose with returns of 2.30% (0.447), statistically insignificant from zero. These figures provide an initial observation that while acquirers in the media at announcement earn lower returns, this may lead to better long-term performance.

As would be expected, those acquirers that are in the media sample are on average larger than those without media. The mean size of acquirers in the media sample is equal to £2,238.7m while those without media have a market value of £1,840.4m on average. This logically rings true given the preference for the media to follow larger companies due to the higher availability of information, and indeed due to the desire to cater to reader demand (Fang and Peress, 2009).

The relative size for the media sample is shown to be significantly smaller than that of the no media sample. Targets in the media sample are on average 1.69 times the size of the acquirer while those in the no media sample are on average 60.44 times the size of the acquirer. The bigger relative size of the firms, as well as the smaller size of the acquirer, raises the risk involved in investing such that the higher announcement returns may reflect enhanced compensation for bearing such risk.

The run-up for both samples is roughly the same. On average, acquirers in the media earn 12.41% in the run-up period while those not in the media earn 12.39%. This positive run-up reflects evidence that there is a leakage of information before announcement into the market regarding corporate events violating market efficiency. Although the media sample earns more as would be expected, this is only marginally exceeding the normal returns earned and so little can be inferred in this regard in terms of examining the media effect.

There are 15 deals that are hostile within the no media sample but none within the media one, indicating that hostile approaches are typically not utilised by UK acquirers. Approximately 49% of targets are foreign for acquirers in the media, while this figure is slightly lower at 42% for those not in the media. This potentially is reflecting the increased globalisation of world markets with the ability to transfer funds easily internationally to gain global exposure for the brand while also opening the opportunity to buy the intangible resources of foreign companies (Doukas and Travlos, 1988; Morck and Yeung, 1991). There are few deals that are competed but there are slightly more deals that are in pursuit of private targets. 43% of acquirers covered in the media acquire a private target while this is equally true for those acquirers not in the media with the respective figure at 42%.

As has been previously shown by Doukas and Petmezas (2007), 96% of transactions are financed using 100% cash by acquirers covered in the media while the figure is equally high at 83% for acquirers not covered in the media. The preference for cash is a documented fact of the UK market, often cited as being due to the typical target being a family-owned private enterprise.

Approximately 42% of acquirers covered in the media acquire a target in an industry unrelated to their co-operations, whereas this is 46% for the no media sample. Finally it takes roughly the same time for acquirers to complete their deals whether they are in the media or not – circa 28/29 days – such that media coverage does not appear to speed up the acquisition process.

Focussing more on the media sample, the statistics indicate that on average, acquirers in the media have 43 articles written about them surrounding deal announcement. Moreover, these score a relatively low pessimism factor of only 0.0045. The sentiment of the article however is shown to sway more towards a negative positioning, as is the preference of the media to report the bad rather than the good, with 12 words on average being classified as negative in the headlines of the articles, as opposed to only 5 positive. These figures indicate that the media uses more negative words than positive in the headline, arguably suggesting that bad news sells more than good (Baumeister et al., 2001).

Using the above sample, this chapter will now progress to analysing the effect of the media at both a univariate and multivariate level. The main results presented relate to a three-day short-term window and a long-term period of thirty-six months. For robustness, the short-term window was extended to five-days while the long-term was shortened to twelve and twenty-four months. These results are not discussed in the main text but are available at the end of this chapter in Tables 87 to 122.

5.3. Empirical Findings

5.3.1. Short-Term Analysis

Earlier in the study we proposed that there may be an effect of media coverage upon an acquirer's returns over the short and long-term via the sheet distribution and exposure that the mass media would exert by bringing the deal to the attention of current and prospective investors of the firm.

The short-term results for the full sample, as shown in Table 63, of those deals which do have mass media coverage (termed 'media' hereafter) earn 0.60% (0.001) at announcement, while those deals that do not feature in mass media (termed 'no media' hereafter) earn 1.05% (0.000). This represents a -0.45% (0.053) underperformance, which remains consistent when assessing the purchase of private targets. In this instance, the underperformance rises to -0.68% (0.063). These results indicate that media coverage at announcement significantly reduces an acquirer's returns.

The existing literature has revealed that a primary role of the media is to distribute news and information to a wide range of people. The short-term results indicate that while on average positive returns are earned there is a significant incentive to remain out of the public eye at the time of the deal announcement. In part, this could be due to the way in which the media portrays this information to the market. Given the uncertainty and anticipation over how the deal will fare over time, the underperformance of the media sample may reflect and exacerbate the uncertainty of investors towards that stock over the longer-term once incorporated with the target.

If we shorten the timeframe for media coverage in Table 64 to looking at those deals which have media coverage within the four weeks prior to deal announcement (termed 'media (0,1)' hereafter) these results remain consistent. Deals in the media (0,1) sample generate announcement returns some -0.44% (-0.096) lower than no media deals, marginally significant at the 10% level. This underperformance increases -0.48% (0.038) when looking at deals which have media coverage within six months prior to the deal announcement (termed 'media (0,6)' hereafter) as depicted in Table 65. The results indicate that on average, regardless of the timespan used for assessing the level of media coverage, the effects are consistent – acquirer's highlighted by the press earn lower shareholder returns at announcement.

To assess the characteristics of the deals driving these results, the samples are split according to known determinants, including the method of payment (i.e. cash versus stock), the target listing (i.e. listed versus unlisted), the acquirer size (i.e. large versus small), and the relative size of the deal (i.e. small relative size versus large relative size). On the overall samples - media, media (0,1) and media (0,6) – the results indicate that unlisted targets, listed targets paid for with cash, large acquirers, large acquirers using cash, as well as deals that are of a small relative size for acquirers all deliver significantly lower announcement returns than their respective no media counterparts.

Viewing each individually, then the existing literature has shown that acquisitions of listed relative to unlisted targets reveal difference information particularly via the method of payment used. Travlos (1987) found that the method of payment in an M&A transaction reveals private manager information to the market over the internal perceived value of the firm. The use of stock signals overvaluation as per Myers and Majluf (1984) while the use of cash signals zero to potential undervaluation. In later work, Chang (1998) found that in acquisitions of unlisted targets, this situation changes as it is assumed that the acceptance of stock by the board of an unlisted target would only be agreed upon if the board had become privy to positive information from the acquirer that indicated an undervaluation of that stock at that particular time in the marketplace. The findings from the media coverage analysis reveal that unlisted target acquisitions underperform if the deal is covered in the media. In the media sample this is by -0.68% (0.063) in Table 63 which becomes insignificant in the media (0,1) window in Table 64 to -0.65% (0.135) but is significant in the media (0,6) sample in Table 65. Moreover, acquisitions of listed targets paid for with cash covered in the press lose -1.55% (0.035) against their no media counterparts in Table 63. This result increases to -1.76% (0.031) in the media (0,1) sample in Table 64 and -1.52% (0.043) in the media (0,6) results in Table 65. Interestingly, this underperformance is largely driven by the significantly better performance of cash deals that are not covered in the media. Therefore the method of payment anomaly may be in part driven by the attention given to media deals.

The size of the acquirer is also shown to be a determining factor. The small size effect has highlighted the outperformance of small firms relative to large (Fama and French, 1993). This is usually described as being due to less attention being given to small firms relative to larger firms that typically have larger analyst followings and feature more in the business press. This finding remains true across both the media and no media samples with small firms consistently outperforming larger ones by 1.62% (0.000) and 0.80% (0.048) respectively in Table 66. There is no difference however between the performance of media and no media small firms, with a return differential of only -0.20% (0.695) statistically indifferent from zero. Large firms on the other hand in the no media sample earn significant returns of 0.83% (0.000) at announcement, some 1.02% (0.001) higher than large firms in the media sample. This is also true for large acquirers that pay using cash. This would support findings that the underperformance of large firms is driven by a larger exposure in the market for these companies, as those covered in tier one media undoubtedly have been subject to higher scrutiny than those which have not. These results remain true in Tables 67 and 68 for the Media 0,1 and Media 0,6 samples.

The final known anomaly is the relative size of the deal (Asquith, Bruner and Mullins, 1983). The small the target relative to the acquirer, then logic holds that the lesser the effect on the acquirer's stock price. An acquirer worth £80bn acquiring a £10m target could probably do so out of the firm's cash and cash equivalent holdings and so there would be little impact on the stock price, as it would be unlikely to materially affect the firm moving forward. On the other hand, an acquirer worth £80bn acquiring a £70bn target would probably need vast financing and the deal would certainly impact the future prospects of the acquirer thereby invoking a stock price reaction. The findings once the samples are stratified according to the relative size of the firms involved indicate that large relative size deals significantly outperform small relative size deals in the no media sample by 1.59% (0.000) however they significant underperform in the media sample by 1.64% (0.000) as evidenced in Table 69. It is plausible to think that the media exposure of the size of the two companies potentially creates greater uncertainty for investors when there is a small difference in the deal value relative to the acquirer's market value thereby invoking a greater performance for small deals that will be relatively easy for the acquirer to integrate. However, media deals in which there is a large size differential between acquirer and target statistically underperform by -2.32% (0.000) on the whole. This is driven by the better performance of the no media acquirers who earn positive returns of 1.94% (0.000). These results remain true for the Media 0,1 and Media 0,6 samples in Tables 70 and 71 respectively.

All of the results presented here indicate that on the whole media deals underperform no media deals. However, there are better returns for acquirers of small targets relative to their size which earn 0.91% (0.025) greater announcement returns. Media coverage therefore generates significantly lower announcement returns for acquirers. All of these results are confirmed and supported in the five-day robustness checks available in Tables 87 to 122 at the end of this chapter.

5.3.2. Long-Term Analysis

While the short-term results indicate that media deals significantly underperform no media deals, the long-term results reveal the opposite. Over a thirty-six month post-announcement period, deals covered in the media do not lose with insignificant returns of 2.30% (0.447) while their no media counterparts lose -27.58% (0.000), as shown in Table 72. This leads to a statistically significant outperformance of 29.88% (0.000). This remains true for media cash deals which earn 25.78% (0.000) greater long-term returns. Controlling for the method of payment, the media sample significantly loses -41.01% (0.042) for deals paid for with stock. This is lower than the no media stock deals which lose -55.80% (0.000) but the difference is statistically insignificant.

The long-term outperformance of media deals on the whole is supported in the media (0,1) and media (0,6) samples in Tables 73 and 74 respectively. The media (0,1) sample sees an outperformance of 29.96% (0.000) driven by the fact that no media deals significantly lose -27.58% (0.000) while media deals do not lose with 2.38% (0.477) returns, statistically insignificant from zero, depicted in Table 73. This is also true in the media (0,6) sample with a respective outperformance of 29.50% (0.000) as shown in Table 74.

The outperformance of media deals over the long-term indicates a potential disciplinary role of the media for acquirers. While announcement returns are generally lower for acquirers covered in the media, the long-term results are shown to be positive indicating that the uncertainty over the quality of the deal is perhaps unfounded over a long-term period. As the deal becomes known by the market and time shows the success of the integration, the acquirer is rewarded with significantly better returns. In this way the media coverage of the deal, while drawing out investor uncertainty in the short-term, perhaps draws attention for the investor to this deal over a prolonged period. Barber and Odean (2008) write that an investor faces a choice primarily when buying stocks. The stocks that catch their attention and match their investment style will likely lead to their inclusion in the investor's portfolio. When coming to sell however, the investor has only a small selection of stocks with which to assess. Therefore, while the media may attract investment for the acquirer from contrarian investors for example in the short-term, once an investor holds the acquirer's stock in their portfolio, the lack of media coverage could provide more uncertainty for investors who do not have information about the firm's on-going performance. Thus while the media negatively impacts acquirer returns in the short term, this is reversed over the long-term whereby the increased information can aid the investor's selling decision.

The results are stratified once more according to the known determinants highlighted by the previous literature - the method of payment (i.e. cash versus stock), the target listing (i.e. listed versus unlisted), the acquirer size (i.e. large versus small), and the relative size of the deal (i.e. small relative size versus large relative size). On the overall samples - media, media (0,1) and media (0,6) – the results indicate that across all categories, acquirer returns are significantly better when the deal has had media coverage.

The outperformance appears to be driven by the statistical underperformance of the no media sample. There are significantly negative losses across all categories in the long-term analysis for acquirers in the no media sample. Conversely all categories generally indicate zero abnormal returns for acquirers with insignificant long term returns for the media sample. There are though significantly positive returns for the media sample in the small acquirer category. Small acquirers earn 15.92% (0.025) returns over the thirty-six month post-announcement period, some 48.41% (0.000) higher than their no media counterparts as shown in Table 75. This is also true for small acquirers that pay using cash (an outperformance of 43.94% (0.000)), who earn 20.78% (0.004) over the long-term. The heightened exposure of these large firms is likely to cause a greater long-term performance as it reduces some of the uncertainty related to investing in these types of organisations. These results remain true in the Media 0,1 sample in Table 76 and the Media 0,6 sample in Table 77.

The final stratification is for the relative size of the deal as indicated by Asquith, Bruner and Mullins (1983). Table 78 shows that media acquirers do not lose with statistically insignificant 3.52% (0.531) returns for acquirers of smaller targets as well as for those of larger targets relative to their own size of -4.59% (0.312). However, the differential between media and no media acquirers once again is statistically significant, with a 31.01% (0.000) on average better performance for small relative size deals, and a 26.16% (0.000) on average better performance for large relative size deals. These results are supported once gain in the Media 0,1 and Media 0,6 samples in Tables 79 and 80 respectively. These results serve to reaffirm the better performance of acquirers covered in the media over the long-term through the absence of losses.

The long-term results discussed here are supported in the twelve-month and twenty-four month robustness checks, and the results are provided for your perusal at the end of this chapter in Tables 87 to 122. The findings in the long-term indicate for managers that media coverage leads to better long-term performance through, in general, through not losing, rather than gaining.

5.3.3. Cross-Sectional Analysis

The first research question analysed the impact of media coverage around a deal's announcement on an acquirer's short and long-term returns. The univariate results indicated that in the short-term, acquirers significantly underperform when their deal features in tier one media. This finding reverses over the long-term however, where there is an outperformance of the media sample relative to the no media sample.

A drawback of univariate analyses is that it only indicates an effect rather than exhibiting any relation or pattern. For this reason, cross-sectional analysis is utilised to investigate the relationship between acquirer returns and media coverage. The attitude of the media is also included in this section. It should be noted that the univariate analyses are not stratified by media attitude due to small sample sizes once the deals are segregated across the various categories. Instead, media attitude variables are included in the cross-sectional analysis. The variables for the cross-sectional are outlined earlier in Section 5.2.5.3. and regressions are conducted under the ordinary least squares methodology.

The cross-sectional results in Table 81 indicate that while the short-term univariate revealed a statistical underperformance of media deals relative to no media deals, the is no statistical directional relationship between the two. Modelling three-day acquirer CARs, the media exposure variable is statistically unrelated with firm returns at any conventional level with a coefficient of -0.0010 (0.675). Moreover, none of the additional primary variables display statistical significance. Media attitude, as modelled using the pessimism factor is positively related to returns with a coefficient of 0.2207 but again this fails to hold any statistical weighting with a p-value of 0.386.

Despite this indication that there is no directional relationship between media coverage or the attitude of the media with acquirer returns, there are a number of control variables for which we find support. As indicated by the univariate analyses, the size of the acquirer one month before the acquisition is shown to be statistically negatively related to acquirer returns, such that the larger the firm is, the smaller the announcement return for shareholders. This supports the existing evidence in relation to the effect of size upon firm returns (Fama and French, 1993).

Asquith, Bruner and Mullins (1983) show evidence that the relative size of the transaction will have an influence over the announcement returns. The intuition is that the smaller the target relative to the acquirer, then the smaller the impact on the firm's operations and clearly, the easier it should be to absorb and integrate the firm. The relative size variable in these regressions supports these findings. There is a statistically positive relationship exhibited between acquirer three-day CARs and the relative size of the deal. This infers that the larger the relative size of the deal, the better the acquirer announcement returns. These results are statistically significant at the 1% level across models (2) to (9). The announcement return arguably should be larger as the relative size is larger in line with Asquith, Bruner and Mullins (1987) as such situations reflect an actual change in expectations or performance for the bidder.

The hostile variable, which is included only in model (1) as there are not enough deals in the media sample for its inclusion, is shown to be negatively related to announcement returns at the 1% level, in line with the evidence that suggests such approaches are more likely to be met with target resistance measures. Moreover, if the target is non-UK domiciled then there is a statistically negative relation with acquirer announcement returns, but again this is only in the full sample and so is not driven or related necessarily to the effect of the media.

The time between announcement and completion, denoted 'Time Interval', is shown as statistically positively related to acquirer returns in the full and media samples. This indicates that the longer the time between announcement and deal completion, the better the returns for the acquirer at announcement. Deals that do take longer to complete tend to be more carefully negotiated and scrutinised. Without specifically delving into the characteristics of each deal, at a glance it could be that such deals are met with a better market reaction as more information is revealed through media coverage and a more rigorous due diligence process.

While the control variables Cash, Competition, Run-Up, Public Target and Unrelated Target are all cited as important variables in the existing literature, the short-term announcement returns in this chapter are not depicted as being statistically related or driven by any.

Moving our analysis to the long-term results in Table 82, there is a very different picture revealed. The long-term univariate analyses indicated that deals covered in the media statistically outperformed those not in the media over a three-year post-announcement period. The cross-sectional analysis confirms these results, with a statistically positive relationship exhibited between media coverage and long-run acquirer thirty-six month BHARs. The coefficient of 0.2338 on the Tier One Media Exposure variable has statistically positive effect on acquirer returns at the 1% level of significance. Moreover, the number of articles written about the acquirer over the full media event window (i.e. twelve months prior to the acquisition) is also shown to be statistically positively related to acquirer long-term returns, with a coefficient of 0.0226 and respective p-value of 0.030, significant therefore at the 5% level. These results are supported when modelling acquirer returns over a twenty-four month period but the Media Frequency variable loses its significance when modelling acquirer twelve-month acquirer BHARs.

In addition, while the attitude of the media, as expressed using the Pessimism Factor of Garcia (2013), is not related to short-term acquirer returns, there is a statistically positive relationship displayed between the Pessimism Factor and acquirer thirty-six month BHARs. The relevant coefficient of 0.0861 is statistically significant at the 5% level with a p-value of 0.024. This indicates that the greater the pessimism in the media content, the better the long-term return. Earlier, evidence from the media communication literature was cited which highlighted a preference for the media to promote and report the negative as opposed to reporting positive news. Blood and Phillips (1995) discussed this concept of media malady and highlighted the effects of negative media upon investors. Indeed, Baumeister et al. (2001) support that negative news stories exert a stronger impact than positive ones do on investors.

The cross-sectional results reveal that this corroborates with the acquirers modelled in this chapter. The lack of statistical significance for this variable using short-term acquirer CARs versus the statistical positive relationship when modelling long-term acquirer BHARs potentially infers that the communication and psychology literature is supported in these samples – those firms that have stronger pessimism in the terminology used within media coverage before the acquisition enjoy much better returns long-term. This could be due to investors causing a potential undervaluation in the short-term which is reversed long-term (although no statistical relationship is found for the short-term and thus this can only be loosely suggested), or indeed could be a reflection of an investment strategy and preference from more experienced investors who buy said stocks in the short-term and benefit long-term akin to a value-based approach. This result also remains consistent when modelling acquirer twenty-four month BHARs, but loses its significance when modelling acquirer twelve-month BHARs suggesting a longer period is required to correct the short-term pressures.

In the long-term cross-sectional results, there are a number of control variables that retain and gain statistical significance. The size of the acquirer continues to be negative related to acquirer returns, while the relative size of the transaction is shown as slightly positively related to acquirer long-term returns at the 1% significance level. Cross-border deals are shown to destroy corporate wealth in the full and media samples at conventional statistical levels ranging from 1% to 10%. Indeed the coefficients of this variable become more negative in the media sample regressions and so the coverage of these transactions could potentially invoke poorer returns.

While the variable Competition was statistically unrelated to acquirer three-day CARs, there is a statistically significant positive relationship shown in the media sample regressions. The coverage of the media in such deals potentially invokes better long-term returns as the acquirer is lauded as the victor in such competed transactions. These results are significant at the 5% level across models (2) to (9).

As Competition reverses and is related to better long-term returns, Time Interval also reverses and is shown to be unrelated to acquirer thirty-six month BHARs. The variables Run-Up, Listed

Target, Unrelated Target and Hostile are all also generally found to be unrelated to acquirer returns long-term.

Overall, the cross-sectional results confirm and reinforce a statistically positive effect for shareholders of acquirers that are covered in the media prior to undertaking a merger and acquisition deals specifically over the long-term. Moreover, the attitude of the media over the long-term is also shown to be positively related to acquirer thirty-six month and twenty-four month BHARs.

For the sake of brevity, the regressions for the Media (0,1) and Media (0,6) samples are not discussed. However, the results are reported in Tables 83 to 86. The main findings are that the media coverage variable retain significance as discussed but the media attitude variable loses statistical significance indicating that the media enhances returns primarily by grabbing investors' attention rather than shaping their mood.

5.4. Conclusion

This chapter examines the relationship between media coverage and media attitude with the returns of a portfolio of acquiring companies during the period 1990 to 2008. The empirical results indicate that acquirers featured in the media in the twelve months prior to the announcement of their M&A deal earn -0.45% (0.053) statistically lower returns at announcement. However this reverses over the long term with a statistical outperformance of the portfolio comprised of acquirers covered in the media relative to those not covered of 29.88% (0.000). This outperformance remains even after controlling for a number of known anomalies. In the long-run, unlisted target acquisitions have an outperformance of 31.68% (0.000) for acquirers in the media sample while for listed targets this rises to 32.72% (0.000); for small acquirers it is 48.41% (0.000) while for large it is 19.73% (0.000); and for small relative size deals it is 31.01% (0.000) and for large relative size transactions it is 26.16% (0.000). These figures over the long run are evidently statistically significant but also economically large, and are consistent when event windows are changed.

Cross-sectional analyses reinforce the positive effects of media coverage on acquirer performance, with statistically significant relationships found between acquirer long-run returns and the tier one media coverage variable. Moreover, the attitude of the media is shown to be influential over the long-term but not the short, with a statistically positive relationship with the constructed acquirer pessimism factor. The media attitude results however lose significance when the pre-announcement media window is shortened from twelve months to six and one indicating that it is more likely to be driven by persistent coverage over time rather than by the attitude itself.

There are two explanations provided that can help to explain the influence of the media upon acquirer returns. The outperformance of small acquirers relative to large ones over time provides support for the impediments to trade hypothesis as developed by Fang and Peress (2009). This hypothesis suggests that a media premium exists on the back of liquidity-related issues for certain stocks. In this manner, being in the media increases the liquidity of a stock through increased exposure and stronger attention.

In addition, the wider media coverage results also indicate support for Merton's (1987) investor recognition hypothesis. The key assumption of Merton's model is that *an investor uses security k in constructing his optimal portfolio only if the investor knows about security k* (Merton, 1987). The idea is that in reality, investors (both individual and institutional) hold only a small fraction of the available investable assets at any one time. The recognition of an investment strategy or vehicle as a profitable source takes time and the different speeds of the dissemination of information leads to time lags between profitable opportunities existing and being eroded by rational market activity. Barber and Odean (2008) built upon the investor recognition hypothesis assessing the influence of mass media in increasing market recognition of securities, warning that *all that glitters may not be gold*.

The hypotheses of Fang and Peress (2009) and Merton (1987) combined with the recent research of Barber and Odean (2008) would infer that media coverage of an acquirer places the firm into the recognition spectrum of an investor who can then filter according to trading preferences (i.e. value-based, fundamentals, etc.). Therefore the mass media can play an important role arguably for enhancing the liquidity of stocks by highlighting the firm as an investable option while the increased recognition of firms in the media should also lead to the existence of a media premium. This chapter supports both of these hypotheses and it is as Fang and Peress (2009: 2024) conclude, the '*media effect is rooted in a Merton-type information story, and liquidity constraints help perpetuate the phenomenon*'.

There are many opportunities for further research that emerge on the back of the empirical findings of this chapter. First, the results indicate that pre-announcement media coverage has a statistically significant post-announcement effect. Further research could analyse the persistence in this media coverage over time, post-announcement in order to ascertain whether there is any change in the level of coverage or the tone of its content after the acquisition completes.

Another opportunity presents itself through combining the analysis with the second chapter of this thesis to examine whether or not the acquirer is engaged in a series of events which catch the public attention - i.e. issuance, acquisitions, managerial turnovers, scandals – or if the M&A is a single corporate event to isolate the effects further. If this is the case, a PR campaign could be in operation and it would be interesting to investigate whether firms themselves are directly aiming to be in the media, and if they are shaping investor opinion. Firms with active media campaigns relative to those without active media campaigns would be an interesting study and is an area offered for further exploration.

Table 61: Chapter Five - Summary Statistics of Media Dataset

This table reports the summary statistics of the media dataset downloaded from LexisNexis for the sample period 01/01/1989 until 31/12/2008. The top 3 publications relate to those which account for over 80% of the articles downloaded, and include The Financial Times, The Times and The Guardian. The average word count relates to the average number of words in each article. The number of companies relates to the number of companies covered by these firms over the sample period. The average number of positive (negative) words in title relates to the mean number of positive (negative) words, as defined using Loughran and McDonald's 2010 Financial Dictionary, in the headline (Title) and articles sourced (Content). This table reports the number of articles matching each category while the respective percentage is provided for relevant statistics.

Statistic	Count	%
Top 3 Publications	365,105	80.60
The Financial Times	*199,023*	*43.93*
The Times	*97,079*	*21.43*
The Guardian	*69,003*	*15.23*
Average Word Count	476 words	
Number of Companies	506	
Average Number of Positive Words in Title	0	
Average Number of Negative Words in Title	1	
Average Number of Positive Words in Content	5	
Average Number of Negative Words in Content	10	

Table 62: Chapter Five - Sample Summary Statistics

This table reports the summary statistics for the final sample for the sample period 01/01/1990 until 31/12/2008. The total sample size is 3,648, with 690 deals matching with the information within the Media Dataset, in the 'Media Sample', and the remaining 2,958 having no top-tier media coverage, as defined in Section 5.2.1. The mean cumulative abnormal return (CAR) is reported for a (-1,+1) window and is calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$,. The mean buy-and-hold abnormal return (BHAR) is reported for a (0,+36) window and is calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The respective p-values are reported in parentheses. Size is reported as the mean market value of the acquirer as measured four-weeks before the announcement date. Relative Size is calculated as the deal value divided by the acquirer's market value as measured four-weeks before the announcement date. Run-Up is the acquirer stock performance in the period -180 days before announcement until day -3. Hostile Approach is the number of acquisitions whereby the acquirer made a hostile offer. Foreign Target is the number of acquisitions where the target was a non-UK firm. Competed Offer refers to the number of deals where the target had offers from more than one acquirer. Private Target is the number of acquisitions where the target was privately held. Cash payment is the number of deals that were financed using 100% with cash (with the percentage relative to sample size reported next to it). Unrelated target is the number of deals where the target was located in an industry different to that of the acquirer as measured using the first two digits of the companies SIC code. Time to Completion is the number of days between date of announcement and date of completion. Media Coverage is the average number of articles covering the acquirer at the date of announcement. Media Pessimism is calculated according to Section 5.2.2 and relates to the mean level of pessimism surrounding acquirers at announcement. Positive (negative) words in title relates to the mean number of positive (negative) words in the headline of articles covering acquirers at announcement.

Statistic	Media Sample	No Media Sample
Mean CAR (-1,+1)	0.60% (0.000)	1.05% (0.000)
Mean BHAR (0, +36)	2.30% (0.447)	-27.58% (0.000)
Size	£2238.7m	£1840.4m
Relative Size	1.69	60.44
Run-Up (-180,-3)	12.41%	12.39%
Hostile Approach	0	15
Foreign Target	336	1091
Competed Offer	5	22
Private Target	295	1249
Cash Payment	665	2451
Unrelated Target	293	1351
Time to Completion	28	29
Media Coverage	43	
Media Pessimism	0.0045	
Positive Words in Title	5	
Negative Words in Title	12	
N	690	2958

Table 63: Three-Day CARs by Target Listing for Media All

This table reports the short-term three-day (-1,+1) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The media sample contains all deals where the acquirer was covered in top UK media twelve months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Private refers to deals where the target was unlisted; Public refers to deals where the target was listed on a stock exchange. Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Private			Public			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media												
Mean	0.60%***	0.67%***	-1.21%	0.57%**	0.71%***	-5.13%	-0.35%	-0.31%	-0.65%	0.92%	1.02%	-4.48%
P-Value	(0.000)	(0.000)	(0.501)	(0.041)	(0.005)	(0.386)	(0.550)	(0.645)	(0.453)	(0.159)	(0.155)	(0.455)
N	690	665	25	295	288	7	103	89	14			
Panel B: No Media												
Mean	1.05%***	1.00%***	1.30%**	1.25%***	0.92%***	2.82%**	0.22%	1.24%***	-1.91%***	1.03%***	-0.32%	4.73%***
P-Value	(0.000)	(0.000)	(0.027)	(0.000)	(0.000)	(0.010)	(0.447)	(0.000)	(0.002)	(0.006)	(0.356)	(0.000)
N	2958	2451	507	1249	1029	220	545	369	176			
Panel C: Differential												
Mean	-0.45%*	-0.33%	-2.51%	-0.68%*	-0.21%	-7.95%	-0.57%	-1.55%**	1.26%			
P-Value	(0.053)	(0.123)	(0.189)	(0.063)	(0.496)	(0.205)	(0.383)	(0.035)	(0.327)			

Table 64: Three-Day CARs by Target Listing for Media (0,1)

This table reports the short-term three-day (-1,+1) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The media sample contains all deals where the acquirer was covered in top UK media one month before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Private refers to deals where the target was unlisted; Public refers to deals where the target was listed on a stock exchange. Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Private			Public			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,1)												
Mean	0.61%***	0.68%***	-1.08%	0.60%*	0.79%**	-6.94%	-0.45%	-0.52%	0.01%	1.05%	1.31%	-6.95%
P-Value	(0.007)	(0.002)	(0.646)	(0.093)	(0.013)	(0.422)	(0.498)	(0.486)	(0.994)	(0.163)	(0.108)	(0.426)
N	524	505	19	208	203	5	88	76	12			
Panel B: No Media												
Mean	1.05%***	1.00%***	1.30%**	1.25%***	0.92%***	2.82%***	0.22%	1.24%***	-1.91%***	1.03%***	-0.32%	4.73%***
P-Value	(0.000)	(0.000)	(0.027)	(0.000)	(0.000)	(0.010)	(0.447)	(0.000)	(0.002)	(0.006)	(0.356)	(0.000)
N	2958	2451	507	1249	1029	220	545	369	176			
Panel C: Differential												
Mean	-0.44%*	-0.32%	-2.38%	-0.65%	-0.13%	-9.76%	-0.67%	-1.76%**	1.92%			
P-Value	(0.096)	(0.184)	(0.332)	(0.135)	(0.727)	(0.281)	(0.354)	(0.031)	(0.155)			

Table 65: Three-Day CARs by Target Listing for Media (0,6)

This table reports the short-term three-day (-1,+1) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The media sample contains all deals where the acquirer was covered in top UK media six months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Private refers to deals where the target was unlisted; Public refers to deals where the target was listed on a stock exchange. Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Private			Public			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,6)												
Mean	0.57%***	0.63%***	-0.97%***	0.56%**	0.70%***	-5.13%	-0.27%	-0.28%	-0.17%	0.83%	0.98%	-4.96%
P-Value	(0.003)	(0.003)	(0.003)	(0.048)	(0.006)	(0.386)	(0.658)	(0.678)	(0.876)	(0.219)	(0.181)	(0.409)
N	672	648	24	291	284	7	99	86	13			
Panel B: No Media												
Mean	1.05%***	1.00%***	1.30%**	1.25%***	0.92%***	2.82%***	0.22%	1.24%***	-1.91%***	1.03%***	-0.32%	4.73%***
P-Value	(0.000)	(0.000)	(0.027)	(0.000)	(0.000)	(0.010)	(0.447)	(0.000)	(0.002)	(0.006)	(0.356)	(0.000)
N	2958	2451	507	1249	1029	220	545	369	176			
Panel C: Differential												
Mean	-0.48%**	-0.37%*	-2.27%	-0.69%*	-0.22%	-7.95%	-0.49%	-1.52%**	1.74%			
P-Value	(0.038)	(0.080)	(0.248)	(0.061)	(0.479)	(0.205)	(0.468)	(0.043)	(0.170)			

Table 66: Three-Day CARs by Acquirer Size for Media All

This table reports the short-term three-day (-1,+1) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The media sample contains all deals where the acquirer was covered in top UK media twelve months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small (Large) refers to deals where the acquirer was small (large) as classified by ranking from highest to lowest all deals according to the market value of the acquirer four-weeks before deal announcement, and taking the bottom (top) 30% at small (large). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small			Large			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media												
Mean	0.60%***	0.67%***	-1.21%	1.43%***	1.55%***	-0.30%	-0.19%	-0.18%	-0.66%	1.62%***	1.73%***	0.36%
P-Value	(0.000)	(0.000)	(0.501)	(0.000)	(0.000)	(0.774)	(0.472)	(0.486)	(0.830)	(0.000)	(0.000)	(0.915)
N	690	665	25	207	194	13	207	205	2			
Panel B: No Media												
Mean	1.05%***	1.00%***	1.30%**	1.63%***	1.52%***	1.94%*	0.83%***	0.77%***	1.43%	0.80%**	0.75%**	0.51%
P-Value	(0.000)	(0.000)	(0.027)	(0.000)	(0.000)	(0.077)	(0.000)	(0.000)	(0.109)	(0.048)	(0.024)	(0.720)
N	2958	2451	507	882	637	245	886	807	79			
Panel C: Differential												
Mean	-0.45%*	-0.33%	-2.51%	-0.20%	0.03%	-2.24%	-1.02%***	-0.95%***	-2.09%			
P-Value	(0.053)	(0.123)	(0.189)	(0.695)	(0.947)	(0.143)	(0.001)	(0.003)	(0.565)			

Table 67: Three-Day CARs by Acquirer Size for Media (0,1)

This table reports the short-term three-day (-1,+1) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The media sample contains all deals where the acquirer was covered in top UK media one month before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small (Large) refers to deals where the acquirer was small (large) as classified by ranking from highest to lowest all deals according to the market value of the acquirer four-weeks before deal announcement, and taking the bottom (top) 30% at small (large). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small			Large			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,1)												
Mean	0.61%***	0.68%***	-1.08%	1.61%***	1.76%***	-1.08%	-0.38%	-0.38%	-0.66%	1.99%***	2.14%***	-0.42%
P-Value	(0.007)	(0.002)	(0.646)	(0.001)	(0.000)	(0.646)	(0.212)	(0.221)	(0.830)	(0.000)	(0.000)	(0.907)
N	524	505	19	157	147	19	157	155	2			
Panel B: No Media												
Mean	1.05%***	1.00%***	1.30%**	1.63%***	1.52%***	1.94%*	0.83%***	0.77%***	1.43%	0.80%**	0.75%**	0.51%
P-Value	(0.000)	(0.000)	(0.027)	(0.000)	(0.000)	(0.077)	(0.000)	(0.000)	(0.109)	(0.048)	(0.024)	(0.720)
N	2958	2451	507	882	637	245	886	807	79			
Panel C: Differential												
Mean	-0.44%*	-0.32%	-2.38%	-0.02%	0.24%	-3.02%	-1.21%***	-1.15%***	-2.09%			
P-Value	(0.096)	(0.184)	(0.332)	(0.973)	(0.664)	(0.249)	(0.001)	(0.001)	(0.565)			

Table 68: Three-Day CARs by Acquirer Size for Media (0,6)

This table reports the short-term three-day (-1,+1) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The media sample contains all deals where the acquirer was covered in top UK media six months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small (Large) refers to deals where the acquirer was small (large) as classified by ranking from highest to lowest all deals according to the market value of the acquirer four-weeks before deal announcement, and taking the bottom (top) 30% at small (large). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small			Large			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,6)												
Mean	0.57%***	0.63%***	-0.97%***	1.43%***	1.55%***	-0.30%	-0.17%	-0.17%	-0.66%	1.60%***	1.72%***	0.36%
P-Value	(0.003)	(0.003)	(0.003)	(0.000)	(0.000)	(0.774)	(0.523)	(0.538)	(0.830)	(0.001)	(0.000)	(0.915)
N	672	648	24	202	189	13	202	200	2			
Panel B: No Media												
Mean	1.05%***	1.00%***	1.30%**	1.63%***	1.52%***	1.94%*	0.83%***	0.77%***	1.43%	0.80%**	0.75%**	0.51%
P-Value	(0.000)	(0.000)	(0.027)	(0.000)	(0.000)	(0.077)	(0.000)	(0.000)	(0.109)	(0.048)	(0.024)	(0.720)
N	2958	2451	507	882	637	245	886	807	79			
Panel C: Differential												
Mean	-0.48%**	-0.37%*	-2.27%	-0.20%	0.03%	-2.24%	-1.00%***	-0.94%***	-2.09%			
P-Value	(0.038)	(0.080)	(0.248)	(0.698)	(0.943)	(0.143)	(0.002)	(0.004)	(0.565)			

Table 69: Three-Day CARs by Relative Size for Media All

This table reports the short-term three-day (-1,+1) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The media sample contains all deals where the acquirer was covered in top UK media twelve months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small Relative Size (Large Relative Size) refers to deals where the deal was of a small relative size (large relative size) for the acquirer as classified by ranking from highest to lowest all deals according to the relative size of the deal (calculated as deal value divided by acquirer market value four-weeks before deal announcement), and taking the bottom (top) 30% at small relative size (large relative size). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small Relative Size			Large Relative Size			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media												
Mean	0.60%***	0.67%***	-1.21%	1.26%***	1.29%***	0.66%	-0.38%	-0.20%	-7.73%	1.64%***	1.49%***	8.39%
P-Value	(0.000)	(0.000)	(0.501)	(0.001)	(0.001)	(0.733)	(0.244)	(0.474)	(0.360)	(0.001)	(0.002)	(0.334)
N	690	665	25	207	196	11	207	202	5			
Panel B: No Media												
Mean	1.05%***	1.00%***	1.30%**	0.35%**	0.37%***	0.05%	1.94%***	1.81%***	2.21%**	-1.59%***	-1.44%***	-2.16%*
P-Value	(0.000)	(0.000)	(0.027)	(0.014)	(0.008)	(0.947)	(0.000)	(0.000)	(0.026)	(0.000)	(0.000)	(0.083)
N	2958	2451	507	912	841	71	849	572	277			
Panel C: Differential												
Mean	-0.45%*	-0.33%	-2.51%	0.91%**	0.92%**	0.61%	-2.32%***	-2.01%***	-9.94%			
P-Value	(0.053)	(0.123)	(0.189)	(0.025)	(0.026)	(0.768)	(0.000)	(0.000)	(0.254)			

Table 70: Three-Day CARs by Relative Size for Media (0,1)

This table reports the short-term three-day (-1,+1) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The media sample contains all deals where the acquirer was covered in top UK media one month before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small Relative Size (Large Relative Size) refers to deals where the deal was of a small relative size (large relative size) for the acquirer as classified by ranking from highest to lowest all deals according to the relative size of the deal (calculated as deal value divided by acquirer market value four-weeks before deal announcement), and taking the bottom (top) 30% at small relative size (large relative size). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small Relative Size			Large Relative Size			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,1)												
Mean	0.61%***	0.68%***	-1.08%	-0.60%	-0.35%	-13.21%	1.38%***	1.42%***	0.73%	-1.98%***	-1.77%***	-13.94%
P-Value	(0.007)	(0.002)	(0.646)	(0.133)	(0.280)	(0.388)	(0.004)	(0.004)	(0.732)	(0.002)	(0.003)	(0.373)
N	524	505	19	157	154	3	157	147	10			
Panel B: No Media												
Mean	1.05%***	1.00%***	1.30%	0.35%**	0.37%***	0.05%	1.94%***	1.81%***	2.21%**	-1.59%***	-1.44%***	-2.16%*
P-Value	(0.000)	(0.000)	(0.027)	(0.014)	(0.008)	(0.947)	(0.000)	(0.000)	(0.026)	(0.000)	(0.000)	(0.083)
N	2958	2451	507	912	841	71	849	572	277			
Panel C: Differential												
Mean	-0.44%*	-0.32%	-2.38%	-0.95%**	-0.72%**	-13.26%	-0.56%	-0.39%	-1.48%			
P-Value	(0.096)	(0.184)	(0.332)	(0.025)	(0.041)	(0.387)	(0.362)	(0.511)	(0.529)			

Table 71: Three-Day CARs by Relative Size for Media (0,6)

This table reports the short-term three-day (-1,+1) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The media sample contains all deals where the acquirer was covered in top UK media six months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small Relative Size (Large Relative Size) refers to deals where the deal was of a small relative size (large relative size) for the acquirer as classified by ranking from highest to lowest all deals according to the relative size of the deal (calculated as deal value divided by acquirer market value four-weeks before deal announcement), and taking the bottom (top) 30% at small relative size (large relative size). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small Relative Size			Large Relative Size			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,6)												
Mean	0.57%***	0.63%***	-0.97%***	-0.44%	-0.25%	-7.73%	1.34%***	1.38%***	0.66%	-1.78%***	-1.63%***	-8.39%
P-Value	(0.003)	(0.003)	(0.003)	(0.191)	(0.377)	(0.356)	(0.001)	(0.001)	(0.733)	(0.001)	(0.001)	(0.334)
N	672	648	24	202	197	5	202	191	11			
Panel B: No Media												
Mean	1.05%***	1.00%***	1.30%**	0.35%**	0.37%***	0.05%	1.94%***	1.81%***	2.21%**	-1.59%***	-1.44%***	-2.16%*
P-Value	(0.000)	(0.000)	(0.027)	(0.014)	(0.008)	(0.947)	(0.000)	(0.000)	(0.026)	(0.000)	(0.000)	(0.083)
N	2958	2451	507	912	841	71	849	572	277			
Panel C: Differential												
Mean	-0.48%**	-0.37%*	-2.27%	-0.79%**	-0.62%**	-7.78%	-0.60%	-0.43%	-1.55%			
P-Value	(0.038)	(0.080)	(0.248)	(0.031)	(0.050)	(0.355)	(0.269)	(0.393)	(0.473)			

Table 72: Thirty-Six Month BHARs by Target Listing Status for Media All

This table reports the long-term thirty-six month (0,+36) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media twelve months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Private refers to deals where the target was unlisted; Public refers to deals where the target was listed on a stock exchange. Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean BHAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Private			Public			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media												
Mean	2.30%	4.00%	-41.01%**	-1.27%	0.88%	-76.99%**	1.19%	11.62%	-66.66%***	-2.46%	-10.74%	-10.33%
P-Value	(0.447)	(0.188)	(0.042)	(0.768)	(0.837)	(0.028)	(0.878)	(0.151)	(0.001)	(0.781)	(0.239)	(0.741)
N	609	586	23	254	247	7	90	78	12			
Panel B: No Media												
Mean	-27.58%***	-21.78%***	-55.80%***	-32.95%***	-25.87%***	-66.03%***	-31.53%***	-20.77%***	-54.78%***	-1.42%	-5.10%	-11.25%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.725)	(0.268)	(0.147)
N	2807	2329	478	1179	971	208	515	352	163			
Panel C: Differential												
Mean	29.88%***	25.78%***	14.79%	31.68%***	26.75%***	-10.96%	32.72%***	32.39%***	-11.88%			
P-Value	(0.000)	(0.000)	(0.454)	(0.000)	(0.000)	(0.702)	(0.000)	(0.000)	(0.450)			

Table 73: Thirty-Six Month BHARs by Target Listing Status for Media (0,1)

This table reports the long-term thirty-six month (0,+36) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media one month before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Private refers to deals where the target was unlisted; Public refers to deals where the target was listed on a stock exchange. Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean BHAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Private			Public			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,1)												
Mean	2.38%	3.82%	-35.22%	2.36%	4.03%	-55.57%	-8.09%	-0.58%	-57.67%***	10.45%	4.61%	2.10%
P-Value	(0.477)	(0.258)	(0.113)	(0.646)	(0.436)	(0.169)	(0.260)	(0.939)	(0.004)	(0.236)	(0.614)	(0.956)
N	463	446	17	179	174	5	76	66	10			
Panel B: No Media												
Mean	-27.58%***	-21.78%***	-55.80%***	-32.95%***	-25.87%***	-66.03%***	-31.53%***	-20.77%***	-54.78%***	-1.42%	-5.10%	-11.25%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.725)	(0.268)	(0.147)
N	2807	2329	478	1179	971	208	515	352	163			
Panel C: Differential												
Mean	29.96%***	25.60%***	20.58%	35.31%***	29.90%***	10.46%	23.44%***	20.19%**	-2.89%			
P-Value	(0.000)	(0.000)	(0.349)	(0.000)	(0.000)	(0.771)	(0.003)	(0.018)	(0.862)			

Table 74: Thirty-Six Month BHARs by Target Listing Status for Media (0,6)

This table reports the long-term thirty-six month (0,+36) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media six months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Private refers to deals where the target was unlisted; Public refers to deals where the target was listed on a stock exchange. Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean BHAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Private			Public			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,6)												
Mean	1.92%	3.49%	-38.81%	-1.19%	1.00%	-76.99%**	0.99%	10.60%	-64.58%***	-2.18%	-9.60%	-12.41%
P-Value	(0.529)	(0.529)	(0.529)	(0.783)	(0.816)	(0.028)	(0.902)	(0.206)	(0.002)	(0.810)	(0.306)	(0.697)
N	594	572	22	250	243	7	86	75	11			
Panel B: No Media												
Mean	-27.58%***	-21.78%***	-55.80%***	-32.95%***	-25.87%***	-66.03%***	-31.53%***	-20.77%***	-54.78%***	-1.42%	-5.10%	-11.25%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.725)	(0.268)	(0.147)
N	2807	2329	478	1179	971	208	515	352	163			
Panel C: Differential												
Mean	29.50%***	25.27%***	16.99%	31.76%***	26.87%***	-10.96%	32.52%***	31.37%***	-9.80%			
P-Value	(0.000)	(0.000)	(0.408)	(0.000)	(0.000)	(0.702)	(0.000)	(0.001)	(0.561)			

Table 75: Thirty-Six Month BHARs by Acquirer Size for Media All

This table reports the long-term thirty-six month (0,+36) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media twelve months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small (Large) refers to deals where the acquirer was small (large) as classified by ranking from highest to lowest all deals according to the market value of the acquirer four-weeks before deal announcement, and taking the bottom (top) 30% at small (large). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small			Large			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media												
Mean	2.30%	4.00%	-41.01%**	15.92%**	20.78%***	-56.26%**	-1.31%	-1.16%	-14.64%	17.23%**	21.94%***	-41.62%
P-Value	(0.447)	(0.188)	(0.042)	(0.025)	(0.004)	(0.042)	(0.725)	(0.758)	(0.225)	(0.031)	(0.007)	(0.125)
N	609	586	23	190	178	12	177	175	2			
Panel B: No Media												
Mean	-27.58%***	-21.78%***	-55.80%***	-32.49%***	-23.16%***	-56.50%***	-21.04%***	-18.83%***	-43.99%***	-11.45%***	-4.33%	-12.51%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.005)	(0.341)	(0.323)
N	2807	2329	478	822	592	230	831	758	73			
Panel C: Differential												
Mean	29.88%***	25.78%***	14.79%	48.41%***	43.94%***	0.24%	19.73%***	17.67%***	29.35%**			
P-Value	(0.000)	(0.000)	(0.454)	(0.000)	(0.000)	(0.992)	(0.000)	(0.000)	(0.026)			

Table 76: Thirty-Six Month BHARs by Acquirer Size for Media (0,1)

This table reports the long-term thirty-six month (0,+36) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media one month before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small (Large) refers to deals where the acquirer was small (large) as classified by ranking from highest to lowest all deals according to the market value of the acquirer four-weeks before deal announcement, and taking the bottom (top) 30% at small (large). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small			Large			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,1)												
Mean	2.38%	3.82%	-35.22%	11.42%	15.62%**	-35.22%	-1.88%	-1.68%	-14.64%	13.30%	17.30%*	-20.58%
P-Value	(0.477)	(0.258)	(0.113)	(0.132)	(0.048)	(0.113)	(0.645)	(0.683)	(0.225)	(0.122)	(0.052)	(0.357)
N	463	446	17	146	137	17	135	133	2			
Panel B: No Media												
Mean	-27.58%***	-21.78%***	-55.80%***	-32.49%***	-23.16%***	-56.50%***	-21.04%***	-18.83%***	-43.99%***	-11.45%***	-4.33%	-12.51%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.005)	(0.341)	(0.323)
N	2807	2329	478	822	592	230	831	758	73			
Panel C: Differential												
Mean	29.96%***	25.60%***	20.58%	43.91%***	38.78%***	21.28%	19.16%***	17.15%***	29.35%**			
P-Value	(0.000)	(0.000)	(0.349)	(0.000)	(0.000)	(0.343)	(0.000)	(0.000)	(0.026)			

Table 77: Thirty-Six Month BHARs by Acquirer Size for Media (0,6)

This table reports the long-term thirty-six month (0,+36) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media six months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small (Large) refers to deals where the acquirer was small (large) as classified by ranking from highest to lowest all deals according to the market value of the acquirer four-weeks before deal announcement, and taking the bottom (top) 30% at small (large). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small			Large			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,6)												
Mean	1.92%	3.49%	-38.81%	15.86%**	20.83%***	-56.26%**	-1.84%	-1.69%	-14.64%	17.70%**	22.52%***	-41.62%
P-Value	(0.529)	(0.529)	(0.529)	(0.025)	(0.004)	(0.042)	(0.626)	(0.658)	(0.225)	(0.027)	(0.006)	(0.125)
N	594	572	22	186	174	12	173	171	2			
Panel B: No Media												
Mean	-27.58%***	-21.78%***	-55.80%***	-32.49%***	-23.16%***	-56.50%***	-21.04%***	-18.83%***	-43.99%***	-11.45%***	-4.33%	-12.51%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.005)	(0.341)	(0.323)
N	2807	2329	478	822	592	230	831	758	73			
Panel C: Differential												
Mean	29.50%***	25.27%***	16.99%	48.35%***	43.99%***	0.24%	19.20%***	17.14%***	29.35%**			
P-Value	(0.000)	(0.000)	(0.408)	(0.000)	(0.000)	(0.992)	(0.000)	(0.000)	(0.026)			

Table 78: Thirty-Six Month BHARs by Relative Size for Media All

This table reports the long-term thirty-six month (0,+36) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media twelve months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small Relative Size (Large Relative Size) refers to deals where the deal was of a small relative size (large relative size) for the acquirer as classified by ranking from highest to lowest all deals according to the relative size of the deal (calculated as deal value divided by acquirer market value four-weeks before deal announcement), and taking the bottom (top) 30% at small relative size (large relative size). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean BHAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small Relative Size			Large Relative Size			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media												
Mean	2.30%	4.00%	-41.01%**	3.52%	3.57%	2.78%	-4.59%	-2.13%	-89.58%**	8.11%	5.70%	92.36%*
P-Value	(0.447)	(0.188)	(0.042)	(0.531)	(0.529)	(0.936)	(0.312)	(0.634)	(0.030)	(0.261)	(0.429)	(0.054)
N	609	586	23	184	174	10	178	173	5			
Panel B: No Media												
Mean	-27.58%***	-21.78%***	-55.80%***	-27.49%***	-26.29%***	-41.21%***	-30.75%***	-20.17%***	-53.04%***	3.26%	-6.12%	11.83%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.003)	(0.000)	(0.000)	(0.000)	(0.440)	(0.198)	(0.418)
N	2807	2329	478	872	802	70	802	544	258			
Panel C: Differential												
Mean	29.88%***	25.78%***	14.79%	31.01%***	29.86%***	43.99%	26.16%***	18.04%***	-36.54%			
P-Value	(0.000)	(0.000)	(0.454)	(0.000)	(0.000)	(0.248)	(0.000)	(0.003)	(0.257)			

Table 79: Thirty-Six Month BHARs by Relative Size for Media (0,1)

This table reports the long-term thirty-six month (0,+36) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media one month before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small Relative Size (Large Relative Size) refers to deals where the deal was of a small relative size (large relative size) for the acquirer as classified by ranking from highest to lowest all deals according to the relative size of the deal (calculated as deal value divided by acquirer market value four-weeks before deal announcement), and taking the bottom (top) 30% at small relative size (large relative size). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean BHAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small Relative Size			Large Relative Size			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,1)												
Mean	2.38%	3.82%	-35.22%	-5.80%	-3.55%	-103.79%*	-0.63%	0.21%	-12.64%	-5.17%	-3.76%	-91.15%*
P-Value	(0.477)	(0.258)	(0.113)	(0.231)	(0.453)	(0.061)	(0.920)	(0.974)	(0.716)	(0.516)	(0.636)	(0.066)
N	463	446	17	134	131	3	137	128	9			
Panel B: No Media												
Mean	-27.58%***	-21.78%***	-55.80%***	-27.49%***	-26.29%***	-41.21%***	-30.75%***	-20.17%***	-53.04%***	3.26%	-6.12%	11.83%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.003)	(0.000)	(0.000)	(0.000)	(0.440)	(0.198)	(0.418)
N	2807	2329	478	872	802	70	802	544	258			
Panel C: Differential												
Mean	29.96%***	25.60%***	20.58%	21.69%***	22.74%***	-62.58%	30.12%***	20.38%***	40.40%			
P-Value	(0.000)	(0.000)	(0.349)	(0.000)	(0.000)	(0.128)	(0.000)	(0.007)	(0.269)			

Table 80: Thirty-Six Month BHARs by Relative Size for Media (0,6)

This table reports the long-term thirty-six month (0,+36) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media six months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small Relative Size (Large Relative Size) refers to deals where the deal was of a small relative size (large relative size) for the acquirer as classified by ranking from highest to lowest all deals according to the relative size of the deal (calculated as deal value divided by acquirer market value four-weeks before deal announcement), and taking the bottom (top) 30% at small relative size (large relative size). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean BHAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small Relative Size			Large Relative Size			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,6)												
Mean	1.92%	3.49%	-38.81%	-4.53%	-2.01%	-89.58%**	3.10%	3.12%	2.78%	-7.63%	-5.13%	-92.36%*
P-Value	(0.529)	(0.529)	(0.529)	(0.325)	(0.657)	(0.030)	(0.591)	(0.592)	(0.936)	(0.301)	(0.486)	(0.054)
N	594	572	22	174	169	5	179	169	10			
Panel B: No Media												
Mean	-27.58%***	-21.78%***	-55.80%***	-27.49%***	-26.29%***	-41.21%***	-30.75%***	-20.17%***	-53.04%***	3.26%	-6.12%	11.83%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.003)	(0.000)	(0.000)	(0.000)	(0.440)	(0.198)	(0.418)
N	2807	2329	478	872	802	70	802	544	258			
Panel C: Differential												
Mean	29.50%***	25.27%***	16.99%	22.96%***	24.28%***	-48.37%	33.85%***	23.29%***	55.82%			
P-Value	(0.000)	(0.000)	(0.408)	(0.000)	(0.000)	(0.160)	(0.000)	(0.001)	(0.137)			

Table 81: Three-Day Cross-Sectional Analysis for Media All

This table reports the results of the cross-sectional analysis for the short-term. The short-term is modelled using three-day (-1,+1) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The independent variables are as follows: *Tier One Media Exposure* is a binary variable that takes the value of 1 if the acquirer was covered in top UK media twelve months before announcement announcement as defined in Section 5.2.1; *Media Coverage* is the number of articles covering the acquiring in top UK media twelve months before announcement as defined in Section 5.2; *Media Attitude* is the level of pessimism regarding the bidder around the event window, as defined in Section 5.2; *Positive (Negative) Words in Title* is the number of positive (negative) words in the titles of the articles covering the acquirer in top UK media twelve months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Positive (Negative) Words in Content* is the number of positive (negative) words in the content of the articles covering the acquirer in top UK media twelve months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Ln(Size)* is the logarithm of the acquirer's market value as measured one month before announcement; *Relative Size* is calculated as the deal value divided by the market value of the acquirer, as measured one month before announcement; *Run-Up* is the CAR of the acquirer over a (-300,-3) window; *Hostile* is a binary variable that takes the value of 1 if the acquirer uses hostile approach techniques; *Foreign Target* is a binary variable that takes the value of 1 if the target is located outside of the UK; *Competition* is a binary variable that takes the value of 1 if there was more than one offer for the target; *Public Target* is a binary variable that takes the value of 1 if the target is listed on a stock exchange; *Cash(Stock)* is a binary variable that takes the value of 1 if the deal is financed 100% using cash(stock); *Unrelated Target* is a binary variable that takes the value of 1 if the target is in a different to that of the acquirer as measured using the two-digit primary SIC code; *Time Interval* measures the number of days between the announcement and completion dates. The possible existence of homoscedasticity is controlled for, with the p-values reported in parentheses using robust standard errors. Statistical significance at the 1%, 5% and 10% levels are denoted ***, ** and * respectively.

	1	2	3	4	5	6	7
Tier One Media Exposure	-0.0010 (0.675)						
Media Coverage		0.0001 (0.934)					
Media Attitude			0.2207 (0.386)				
Postive Words in Title				0.0001 (0.424)			
Negative Words in Title					0.0000 (0.313)		
Positive Words in Content						0.0000 (0.289)	
Negative Words in Content							0.0000 (0.291)
Ln (Size)	-0.0075 (0.000)***	-0.0115 (0.002)***	-0.0119 (0.000)***	-0.0121 (0.000)***	-0.0124 (0.000)***	-0.0128 (0.000)***	-0.0127 (0.000)***
Relative Size	0.0000 (0.061)*	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***
Run-Up	0.0031 (0.509)	-0.0053 (0.535)	-0.0035 (0.689)	-0.0052 (0.538)	-0.0050 (0.557)	-0.0051 (0.551)	-0.0050 (0.559)
Hostile	-0.0380 (0.002)***						
Foreign Acquisition	0.0045 (0.072)*	-0.0033 (0.391)	-0.0030 (0.447)	-0.0032 (0.407)	-0.0029 (0.454)	-0.0030 (0.437)	-0.0029 (0.444)
Competition	-0.0082 (0.478)	-0.0018 (0.941)	-0.0012 (0.961)	-0.0012 (0.961)	-0.0007 (0.978)	-0.0004 (0.985)	-0.0004 (0.988)
Public Target	-0.0087 (0.012)**	-0.0070 (0.372)	-0.0076 (0.322)	-0.0071 (0.365)	-0.0072 (0.362)	-0.0073 (0.354)	-0.0074 (0.348)
Cash (Stock)	0.0001 (0.986)	0.0221 (0.260)	0.0216 (0.269)	0.0221 (0.264)	0.0219 (0.266)	0.0219 (0.266)	0.0219 (0.267)
Unrelated Target	-0.0011 (0.642)	0.0033 (0.377)	0.0033 (0.383)	0.0033 (0.370)	0.0034 (0.366)	0.0034 (0.360)	0.0034 (0.361)
Time Interval	0.0000 (0.056)*	0.0001 (0.035)**	0.0001 (0.025)**	0.0001 (0.038)**	0.0001 (0.048)**	0.0001 (0.042)**	0.0001 (0.044)**
Constant	0.0257 (0.001)***	0.0170 (0.383)	0.0176 (0.359)	0.0186 (0.342)	0.0195 (0.310)	0.0202 (0.296)	0.0201 (0.298)
N	3415	676	671	676	676	676	676
F-Stat	4.35 (0.000)***	11.09 (0.000)***	10.55 (0.000)***	11.01 (0.000)***	11.10 (0.000)***	11.65 (0.000)***	11.38 (0.000)***
R-Squared	0.02	0.04	0.04	0.04	0.04	0.04	0.04

Table 82: Thirty-Six Month Cross-Sectional Analysis for Media All

This table reports the results of the cross-sectional analysis for the long-term. The long-term is modelled using long-term thirty-six month (0,+36) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The independent variables are as follows: *Tier One Media Exposure* is a binary variable that takes the value of 1 if the acquirer was covered in top UK media twelve months announcement as defined in Section 5.2.1; *Media Coverage* is the number of articles covering the acquiring in top UK media twelve months before announcement as defined in Section 5.1; *Media Attitude* is the level of pessimism regarding the bidder around the event window, as defined in Section 5.2; *Positive (Negative) Words in Title* is the number of positive (negative) words in the titles of the articles covering the acquirer in top UK media twelve months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Positive (Negative) Words in Content* is the number of positive (negative) words in the content of the articles covering the acquirer in top UK media twelve months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Ln(Size)* is the logarithm of the acquirer's market value as measured one month before announcement; *Relative Size* is calculated as the deal value divided by the market value of the acquirer, as measured one month before announcement; *Run-Up* is the CAR of the acquirer over a (-300,-3) window; *Hostile* is a binary variable that takes the value of 1 if the acquirer uses hostile approach techniques; *Foreign Target* is a binary variable that takes the value of 1 if the target is located outside of the UK; *Competition* is a binary variable that takes the value of 1 if there was more than one offer for the target; *Public Target* is a binary variable that takes the value of 1 if the target is listed on a stock exchange; *Cash(Stock)* is a binary variable that takes the value of 1 if the deal is financed 100% using cash(stock); *Unrelated Target* is a binary variable that takes the value of 1 if the target is in a different to that of the acquirer as measured using the two-digit primary SIC code; *Time Interval* measures the number of days between the announcement and completion dates. The possible existence of homoscedasticity is controlled for, with the p-values reported in parentheses using robust standard errors. Statistical significance at the 1%, 5% and 10% levels are denoted ***, ** and * respectively.

	1	2	3	4	5	6	7
Tier One Media Exposure	0.2338						
	(0.000)***						
Media Coverage		0.0226					
		(0.030)**					
Media Attitude			0.0861				
			(0.024)**				
Positive Words in Title				-0.0002			
				(0.882)			
Negative Words in Title					0.0006		
					(0.433)		
Positive Words in Content						0.0000	
						(0.784)	
Negative Words in Content							0.0000
							(0.663)
Ln (Size)	0.0129	-0.1824	-0.1204	-0.1029	-0.1194	-0.1094	-0.1120
	(0.446)	(0.004)***	(0.018)**	(0.053)*	(0.031)**	(0.048)**	(0.039)**
Relative Size	0.0000	0.0003	0.0001	0.0002	0.0001	0.0001	0.0001
	(0.000)***	(0.457)	(0.769)	(0.592)	(0.637)	(0.610)	(0.615)
Run-Up	0.0375	0.0218	0.0614	0.0144	0.0186	0.0149	0.0157
	(0.264)	(0.815)	(0.512)	(0.877)	(0.843)	(0.873)	(0.867)
Hostile	-0.0354						
	(0.852)						
Foreign Acquisition	-0.0913	-0.1237	-0.1125	-0.1215	-0.1169	-0.1206	-0.1199
	(0.002)***	(0.042)**	(0.066)*	(0.048)**	(0.059)*	(0.050)**	(0.052)*
Competition	-0.0296	0.4044	0.4449	0.4137	0.4318	0.4201	0.4241
	(0.847)	(0.010)***	(0.006)***	(0.015)**	(0.011)**	(0.013)**	(0.012)**
Public Target	0.0021	0.0361	0.0108	0.0358	0.0323	0.0342	0.0326
	(0.954)	(0.708)	(0.911)	(0.710)	(0.736)	(0.723)	(0.735)
Cash (Stock)	0.3416	0.5754	0.5232	0.5537	0.5518	0.5531	0.5523
	(0.000)***	(0.005)***	(0.013)**	(0.008)***	(0.009)***	(0.008)***	(0.009)***
Unrelated Target	-0.0999	-0.0457	-0.0548	-0.0471	-0.0446	-0.0460	-0.0453
	(0.000)***	(0.433)	(0.348)	(0.421)	(0.446)	(0.434)	(0.440)
Time Interval	0.0002	0.0007	0.0008	0.0008	0.0007	0.0008	0.0008
	(0.296)	(0.181)	(0.121)	(0.137)	(0.175)	(0.146)	(0.151)
Constant	-0.5140	-0.1406	-0.1492	-0.1856	-0.1481	-0.1710	-0.1644
	(0.000)***	(0.549)	(0.526)	(0.437)	(0.537)	(0.478)	(0.493)
N	3192	595	592	595	595	595	595
F-Stat	14.09	3.68	3.40	2.80	2.86	2.79	2.81
	(0.000)***	(0.000)***	(0.000)***	(0.002)***	(0.002)***	(0.002)***	(0.002)***
R-Squared	0.05	0.04	0.05	0.04	0.04	0.04	0.04

Table 83: Three-Day Cross-Sectional Analysis for Media (0,1)

This table reports the results of the cross-sectional analysis for the short-term. The short-term is modelled using three-day (-1,+1) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The independent variables are as follows: *Tier One Media Exposure* is a binary variable that takes the value of 1 if the acquirer was covered in top UK media one month before announcement as defined in Section 5.2.1; *Media Coverage* is the number of articles covering the acquiring in top UK media one month before announcement as defined in Section 5.1; *Media Attitude* is the level of pessimism regarding the bidder around the event window, as defined in Section 5.2; *Positive (Negative) Words in Title* is the number of positive (negative) words in the titles of the articles covering the acquirer in top UK media one month before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Positive (Negative) Words in Content* is the number of positive (negative) words in the content of the articles covering the acquirer in top UK media one month before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Ln(Size)* is the logarithm of the acquirer's market value as measured one month before announcement; *Relative Size* is calculated as the deal value divided by the market value of the acquirer, as measured one month before announcement; *Run-Up* is the CAR of the acquirer over a (-300,-3) window; *Hostile* is a binary variable that takes the value of 1 if the acquirer uses hostile approach techniques; *Foreign Target* is a binary variable that takes the value of 1 if the target is located outside of the UK; *Competition* is a binary variable that takes the value of 1 if there was more than one offer for the target; *Public Target* is a binary variable that takes the value of 1 if the target is listed on a stock exchange; *Cash(Stock)* is a binary variable that takes the value of 1 if the deal is financed 100% using cash(stock); *Unrelated Target* is a binary variable that takes the value of 1 if the target is in a different to that of the acquirer as measured using the two-digit primary SIC code; *Time Interval* measures the number of days between the announcement and completion dates. The possible existence of homoscedasticity is controlled for, with the p-values reported in parentheses using robust standard errors. Statistical significance at the 1%, 5% and 10% levels are denoted ***, ** and * respectively.

	1	2	3	4	5	6	7
Tier One Media Exposure	-0.0010 (0.675)						
Media Coverage		-0.0050 (0.295)					
Media Attitude			0.2093 (0.307)				
Positive Words in Title				0.0013 (0.044)**			
Negative Words in Title					0.0002 (0.377)		
Positive Words in Content						0.0000 (0.098)*	
Negative Words in Content							0.0000 (0.182)
Ln (Size)	-0.0075 (0.000)***	-0.0104 (0.005)***	-0.0133 (0.002)***	-0.0142 (0.000)***	-0.0131 (0.001)***	-0.0146 (0.000)***	-0.0139 (0.000)***
Relative Size	0.0000 (0.061)*	0.0001 (0.000)***	0.0002 (0.024)**	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***
Run-Up	0.0031 (0.509)	-0.0088 (0.384)	-0.0066 (0.602)	-0.0086 (0.397)	-0.0083 (0.412)	-0.0083 (0.413)	-0.0081 (0.424)
Hostile	-0.0380 (0.002)***						
Foreign Acquisition	0.0045 (0.072)*	-0.0059 (0.173)	0.0005 (0.924)	-0.0051 (0.246)	-0.0053 (0.225)	-0.0050 (0.255)	-0.0051 (0.243)
Competition	-0.0082 (0.478)	0.0003 (0.989)	-0.0158 (0.651)	0.0019 (0.941)	0.0010 (0.970)	0.0016 (0.950)	0.0015 (0.954)
Public Target	-0.0087 (0.012)**	-0.0089 (0.332)	-0.0014 (0.901)	-0.0086 (0.350)	-0.0088 (0.340)	-0.0090 (0.331)	-0.0090 (0.327)
Cash (Stock)	0.0001 (0.986)	0.0204 (0.421)	0.0373 (0.289)	0.0206 (0.421)	0.0208 (0.416)	0.0206 (0.420)	0.0206 (0.419)
Unrelated Target	-0.0011 (0.642)	0.0021 (0.625)	0.0011 (0.833)	0.0019 (0.662)	0.0018 (0.676)	0.0020 (0.636)	0.0019 (0.665)
Time Interval	0.0000 (0.056)*	0.0001 (0.038)**	0.0000 (0.737)	0.0001 (0.054)*	0.0001 (0.046)**	0.0001 (0.052)*	0.0001 (0.049)**
Constant	0.0257 (0.001)***	0.0270 (0.284)	0.0092 (0.795)	0.0284 (0.278)	0.0260 (0.313)	0.0291 (0.262)	0.0279 (0.283)
N	3415	540	342	540	540	540	540
F-Stat	4.35 (0.000)***	9.00 (0.000)***	3.65 (0.000)***	12.01 (0.000)***	11.62 (0.000)***	16.17 (0.000)***	12.21 (0.000)***
R-Squared	0.02	0.05	0.05	0.05	0.05	0.05	0.05

Table 84: Thirty-Six Month Cross-Sectional Analysis for Media (0,1)

This table reports the results of the cross-sectional analysis for the long-term. The long-term is modelled using long-term thirty-six month (0,+36) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The independent variables are as follows: *Tier One Media Exposure* is a binary variable that takes the value of 1 if the acquirer was covered in top UK media one month before announcement as defined in Section 5.2.1; *Media Coverage* is the number of articles covering the acquiring in top UK media one month before announcement as defined in Section 5.2; *Media Attitude* is the level of pessimism regarding the bidder around the event window, as defined in Section 5.2; *Positive (Negative) Words in Title* is the number of positive (negative) words in the titles of the articles covering the acquirer in top UK media one month before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Positive (Negative) Words in Content* is the number of positive (negative) words in the content of the articles covering the acquirer in top UK media one month before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Ln(Size)* is the logarithm of the acquirer's market value as measured one month before announcement; *Relative Size* is calculated as the deal value divided by the market value of the acquirer, as measured one month before announcement; *Run-Up* is the CAR of the acquirer over a (-300,-3) window; *Hostile* is a binary variable that takes the value of 1 if the acquirer uses hostile approach techniques; *Foreign Target* is a binary variable that takes the value of 1 if the target is located outside of the UK; *Competition* is a binary variable that takes the value of 1 if there was more than one offer for the target; *Public Target* is a binary variable that takes the value of 1 if the target is listed on a stock exchange; *Cash(Stock)* is a binary variable that takes the value of 1 if the deal is financed 100% using cash(stock); *Unrelated Target* is a binary variable that takes the value of 1 if the target is in a different to that of the acquirer as measured using the two-digit primary SIC code; *Time Interval* measures the number of days between the announcement and completion dates. The possible existence of homoscedasticity is controlled for, with the p-values reported in parentheses using robust standard errors. Statistical significance at the 1%, 5% and 10% levels are denoted ***, ** and * respectively.

	1	2	3	4	5	6	7
Tier One Media Exposure	-0.0010						
	(0.675)						
Media Coverage		-0.0050					
		(0.295)					
Media Attitude			0.2093				
			(0.307)				
Positive Words in Title				0.0013			
				(0.044)**			
Negative Words in Title					0.0002		
					(0.377)		
Positive Words in Content						0.0000	
						(0.098)*	
Negative Words in Content							0.0000
							(0.182)
Ln (Size)	-0.0075	-0.0104	-0.0133	-0.0142	-0.0131	-0.0146	-0.0139
	(0.000)***	(0.005)***	(0.002)***	(0.000)***	(0.001)***	(0.000)***	(0.000)***
Relative Size	0.0000	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001
	(0.061)*	(0.000)***	(0.024)**	(0.000)***	(0.000)***	(0.000)***	(0.000)***
Run-Up	0.0031	-0.0088	-0.0066	-0.0086	-0.0083	-0.0083	-0.0081
	(0.509)	(0.384)	(0.602)	(0.397)	(0.412)	(0.413)	(0.424)
Hostile	-0.0380						
	(0.002)***						
Foreign Acquisition	0.0045	-0.0059	0.0005	-0.0051	-0.0053	-0.0050	-0.0051
	(0.072)*	(0.173)	(0.924)	(0.246)	(0.225)	(0.255)	(0.243)
Competition	-0.0082	0.0003	-0.0158	0.0019	0.0010	0.0016	0.0015
	(0.478)	(0.989)	(0.651)	(0.941)	(0.970)	(0.950)	(0.954)
Public Target	-0.0087	-0.0089	-0.0014	-0.0086	-0.0088	-0.0090	-0.0090
	(0.012)**	(0.332)	(0.901)	(0.350)	(0.340)	(0.331)	(0.327)
Cash (Stock)	0.0001	0.0204	0.0373	0.0206	0.0208	0.0206	0.0206
	(0.986)	(0.421)	(0.289)	(0.421)	(0.416)	(0.420)	(0.419)
Unrelated Target	-0.0011	0.0021	0.0011	0.0019	0.0018	0.0020	0.0019
	(0.642)	(0.625)	(0.833)	(0.662)	(0.676)	(0.636)	(0.665)
Time Interval	0.0000	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001
	(0.056)*	(0.038)**	(0.737)	(0.054)*	(0.046)**	(0.052)*	(0.049)**
Constant	0.0257	0.0270	0.0092	0.0284	0.0260	0.0291	0.0279
	(0.001)***	(0.284)	(0.795)	(0.278)	(0.313)	(0.262)	(0.283)
N	3415	540	342	540	540	540	540
F-Stat	4.35	9.00	3.65	12.01	11.62	16.17	12.21
	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***
R-Squared	0.02	0.05	0.05	0.05	0.05	0.05	0.05

Table 85: Three-Day Cross-Sectional Analysis for Media (0,6)

This table reports the results of the cross-sectional analysis for the short-term. The short-term is modelled using three-day (-1,+1) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The independent variables are as follows: *Tier One Media Exposure* is a binary variable that takes the value of 1 if the acquirer was covered in top UK media six months before announcement as defined in Section 5.2.1; *Media Coverage* is the number of articles covering the acquiring in top UK media six months before announcement as defined in Section 5.2; *Media Attitude* is the level of pessimism regarding the bidder around the event window, as defined in Section 5.2; *Positive (Negative) Words in Title* is the number of positive (negative) words in the titles of the articles covering the acquirer in top UK media six months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Positive (Negative) Words in Content* is the number of positive (negative) words in the content of the articles covering the acquirer in top UK media six months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Ln(Size)* is the logarithm of the acquirer's market value as measured one month before announcement; *Relative Size* is calculated as the deal value divided by the market value of the acquirer, as measured one month before announcement; *Run-Up* is the CAR of the acquirer over a (-300,-3) window; *Hostile* is a binary variable that takes the value of 1 if the acquirer uses hostile approach techniques; *Foreign Target* is a binary variable that takes the value of 1 if the target is located outside of the UK; *Competition* is a binary variable that takes the value of 1 if there was more than one offer for the target; *Public Target* is a binary variable that takes the value of 1 if the target is listed on a stock exchange; *Cash(Stock)* is a binary variable that takes the value of 1 if the deal is financed 100% using cash(stock); *Unrelated Target* is a binary variable that takes the value of 1 if the target is in a different to that of the acquirer as measured using the two-digit primary SIC code; *Time Interval* measures the number of days between the announcement and completion dates. The possible existence of homoscedasticity is controlled for, with the p-values reported in parentheses using robust standard errors. Statistical significance at the 1%, 5% and 10% levels are denoted ***, ** and * respectively.

	1	2	3	4	5	6	7
Tier One Media Exposure	-0.0010 (0.675)						
Media Coverage		0.0002 (0.844)					
Media Attitude			0.0462 (0.852)				
Positive Words in Title				0.0004 (0.122)			
Negative Words in Title					0.0001 (0.281)		
Positive Words in Content						0.0000 (0.156)	
Negative Words in Content							0.0000 (0.190)
Ln (Size)	-0.0075 (0.000)***	-0.0116 (0.001)***	-0.0121 (0.000)***	-0.0132 (0.000)***	-0.0124 (0.000)***	-0.0132 (0.000)***	-0.0128 (0.000)***
Relative Size	0.0000 (0.061)*	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***
Run-Up	0.0031 (0.509)	-0.0031 (0.721)	-0.0041 (0.653)	-0.0030 (0.730)	-0.0028 (0.747)	-0.0029 (0.740)	-0.0028 (0.750)
Hostile	-0.0380 (0.002)***						
Foreign Acquisition	0.0045 (0.072)*	-0.0041 (0.283)	-0.0033 (0.412)	-0.0038 (0.323)	-0.0037 (0.336)	-0.0037 (0.335)	-0.0037 (0.330)
Competition	-0.0082 (0.478)	-0.0026 (0.914)	-0.0013 (0.959)	-0.0013 (0.957)	-0.0015 (0.951)	-0.0009 (0.971)	-0.0010 (0.966)
Public Target	-0.0087 (0.012)**	-0.0063 (0.433)	-0.0075 (0.348)	-0.0065 (0.416)	-0.0063 (0.429)	-0.0066 (0.411)	-0.0066 (0.408)
Cash (Stock)	0.0001 (0.986)	0.0201 (0.319)	0.0212 (0.309)	0.0200 (0.323)	0.0200 (0.323)	0.0199 (0.325)	0.0199 (0.325)
Unrelated Target	-0.0011 (0.642)	0.0038 (0.316)	0.0038 (0.316)	0.0039 (0.296)	0.0038 (0.311)	0.0039 (0.299)	0.0039 (0.303)
Time Interval	0.0000 (0.056)*	0.0001 (0.032)**	0.0001 (0.029)**	0.0001 (0.039)**	0.0001 (0.041)**	0.0001 (0.040)**	0.0001 (0.040)**
Constant	0.0257 (0.001)***	0.0182 (0.366)	0.0194 (0.348)	0.0225 (0.268)	0.0207 (0.298)	0.0224 (0.263)	0.0218 (0.276)
N	3415	660	639	660	660	660	660
F-Stat	4.35 (0.000)***	10.18 (0.000)***	10.97 (0.000)***	9.78 (0.000)***	9.86 (0.000)***	11.02 (0.000)***	10.22 (0.000)***
R-Squared	0.02	0.04	0.43	0.04	0.04	0.04	0.04

Table 86: Thirty-Six Month Cross-Sectional Analysis for Media (0,6)

This table reports the results of the cross-sectional analysis for the long-term. The long-term is modelled using long-term thirty-six month (0,+36) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The independent variables are as follows: *Tier One Media Exposure* is a binary variable that takes the value of 1 if the acquirer was covered in top UK media six months before announcement as defined in Section 5.2.1; *Media Coverage* is the number of articles covering the acquiring in top UK media six months before announcement as defined in Section 5.2; *Media Attitude* is the level of pessimism regarding the bidder around the event window, as defined in Section 5.2; *Positive (Negative) Words in Title* is the number of positive (negative) words in the titles of the articles covering the acquirer in top UK media six months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Positive (Negative) Words in Content* is the number of positive (negative) words in the content of the articles covering the acquirer in top UK media six months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Ln(Size)* is the logarithm of the acquirer's market value as measured one month before announcement; *Relative Size* is calculated as the deal value divided by the market value of the acquirer, as measured one month before announcement; *Run-Up* is the CAR of the acquirer over a (-300,-3) window; *Hostile* is a binary variable that takes the value of 1 if the acquirer uses hostile approach techniques; *Foreign Target* is a binary variable that takes the value of 1 if the target is located outside of the UK; *Competition* is a binary variable that takes the value of 1 if there was more than one offer for the target; *Public Target* is a binary variable that takes the value of 1 if the target is listed on a stock exchange; *Cash(Stock)* is a binary variable that takes the value of 1 if the deal is financed 100% using cash(stock); *Unrelated Target* is a binary variable that takes the value of 1 if the target is in a different to that of the acquirer as measured using the two-digit primary SIC code; *Time Interval* measures the number of days between the announcement and completion dates. The possible existence of homoscedasticity is controlled for, with the p-values reported in parentheses using robust standard errors. Statistical significance at the 1%, 5% and 10% levels are denoted ***, ** and * respectively.

	1	2	3	4	5	6	7
Tier One Media Exposure	0.2338 (0.000)***						
Media Coverage		0.0414 (0.027)**					
Media Attitude			3.7959 (0.227)				
Positive Words in Title				-0.0002 (0.961)			
Negative Words in Title					0.0011 (0.435)		
Positive Words in Content						0.0000 (0.654)	
Negative Words in Content							0.0000 (0.553)
Ln (Size)	0.0129 (0.446)	-0.1778 (0.004)***	-0.1081 (0.037)**	-0.1031 (0.060)*	-0.1167 (0.034)**	-0.1115 (0.045)**	-0.1138 (0.038)**
Relative Size	0.0000 (0.000)***	0.0002 (0.572)	0.0001 (0.705)	0.0002 (0.579)	0.0001 (0.613)	0.0002 (0.609)	0.0002 (0.606)
Run-Up	0.0375 (0.264)	0.0142 (0.880)	0.0291 (0.759)	0.0000 (1.000)	0.0036 (0.970)	0.0006 (0.995)	0.0015 (0.987)
Hostile	-0.0354 (0.852)						
Foreign Acquisition	-0.0913 (0.002)***	-0.1197 (0.052)*	-0.0861 (0.167)	-0.1220 (0.049)**	-0.1178 (0.059)*	-0.1206 (0.052)*	-0.1200 (0.054)*
Competition	-0.0296 (0.847)	0.4074 (0.013)**	0.4366 (0.008)***	0.4247 (0.013)**	0.4379 (0.010)***	0.4327 (0.011)**	0.4359 (0.010)***
Public Target	0.0021 (0.954)	0.0183 (0.854)	0.0041 (0.966)	0.0291 (0.768)	0.0271 (0.782)	0.0269 (0.785)	0.0255 (0.795)
Cash (Stock)	0.3416 (0.000)***	0.5407 (0.010)***	0.4686 (0.034)**	0.5260 (0.015)**	0.5253 (0.015)**	0.5253 (0.015)**	0.5248 (0.015)**
Unrelated Target	-0.0999 (0.000)***	-0.0457 (0.438)	-0.0192 (0.747)	-0.0457 (0.443)	-0.0441 (0.457)	-0.0441 (0.458)	-0.0435 (0.465)
Time Interval	0.0002 (0.296)	0.0007 (0.166)	0.0008 (0.127)	0.0008 (0.139)	0.0007 (0.163)	0.0008 (0.149)	0.0008 (0.153)
Constant	-0.5140 (0.000)***	-0.1243 (0.603)	-0.1326 (0.593)	-0.1564 (0.526)	-0.1267 (0.605)	-0.1376 (0.578)	-0.1322 (0.590)
N	3192	582	565	582	582	582	582
F-Stat	14.09 (0.000)***	3.37 (0.000)***	2.57 (0.005)***	2.68 (0.003)***	2.73 (0.003)***	2.68 (0.003)***	2.71 (0.003)***
R-Squared	0.05	0.04	0.03	0.03	0.04	0.04	0.04

Table 87: Five-Day CARs by Target Listing Status for Media All

This table reports the short-term five-day (-2,+2) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The media sample contains all deals where the acquirer was covered in top UK media twelve months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Private refers to deals where the target was unlisted; Public refers to deals where the target was listed on a stock exchange. Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Private			Public			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media												
Mean	1.08%***	1.17%***	-1.27%	1.02%***	1.19%***	-5.71%	-0.22%	-0.15%	-0.71%	1.24%	1.34%	-5.00%
P-Value	(0.000)	(0.000)	(0.468)	(0.004)	(0.001)	(0.238)	(0.741)	(0.844)	(0.655)	(0.101)	(0.103)	(0.314)
N	690	665	25	295	288	7	103	89	14			
Panel B: No Media												
Mean	1.21%***	1.21%***	1.22%**	1.39%***	1.07%***	2.90%**	0.30%	1.44%***	-2.09%***	1.09%***	-0.37%	4.99%***
P-Value	(0.000)	(0.000)	(0.048)	(0.000)	(0.000)	(0.013)	(0.358)	(0.000)	(0.003)	(0.010)	(0.361)	(0.000)
N	2958	2451	507	1249	1029	220	545	369	176			
Panel C: Differential												
Mean	-0.13%	-0.04%	-2.49%	-0.37%	0.12%	-8.61%	-0.52%	-1.59%*	1.38%			
P-Value	(0.632)	(0.878)	(0.183)	(0.412)	(0.772)	(0.105)	(0.485)	(0.053)	(0.423)			

Table 88: Five-Day CARs by Acquirer Size for Media All

This table reports the short-term three-day (-2,+2) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The media sample contains all deals where the acquirer was covered in top UK media twelve months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small (Large) refers to deals where the acquirer was small (large) as classified by ranking from highest to lowest all deals according to the market value of the acquirer four-weeks before deal announcement, and taking the bottom (top) 30% at small (large). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small			Large			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media												
Mean	1.08%***	1.17%***	-1.27%	2.20%***	2.39%***	-0.65%	0.12%	0.11%	0.74%	2.08%***	2.28%***	-1.39%
P-Value	(0.000)	(0.000)	(0.468)	(0.000)	(0.000)	(0.679)	(0.706)	(0.722)	(0.802)	(0.000)	(0.000)	(0.665)
N	690	665	25	207	194	13	207	205	2			
Panel B: No Media												
Mean	1.21%***	1.21%***	1.22%**	1.71%***	1.70%***	1.73%	0.93%***	0.91%***	1.11%	0.78%*	0.79%**	0.62%
P-Value	(0.000)	(0.000)	(0.048)	(0.000)	(0.000)	(0.128)	(0.000)	(0.000)	(0.266)	(0.078)	(0.038)	(0.681)
N	2958	2451	507	882	637	245	886	807	79			
Panel C: Differential												
Mean	-0.13%	-0.04%	-2.49%	0.49%	0.69%	-2.38%	-0.81%**	-0.80%**	-0.37%			
P-Value	(0.632)	(0.878)	(0.183)	(0.423)	(0.239)	(0.222)	(0.035)	(0.038)	(0.905)			

Table 89: Five-Day CARs by Relative Size for Media All

This table reports the short-term five-day (-2,+2) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The media sample contains all deals where the acquirer was covered in top UK media twelve months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small Relative Size (Large Relative Size) refers to deals where the deal was of a small relative size (large relative size) for the acquirer as classified by ranking from highest to lowest all deals according to the relative size of the deal (calculated as deal value divided by acquirer market value four-weeks before deal announcement), and taking the bottom (top) 30% at small relative size (large relative size). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small Relative Size			Large Relative Size			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media												
Mean	1.08%***	1.17%***	-1.27%	1.66%***	1.72%***	0.68%	-0.02%	0.18%	-7.94%	1.68%***	1.54%***	8.62%
P-Value	(0.000)	(0.000)	(0.468)	(0.000)	(0.000)	(0.788)	(0.958)	(0.623)	(0.241)	(0.004)	(0.006)	(0.228)
N	690	665	25	207	196	11	207	202	5			
Panel B: No Media												
Mean	1.21%***	1.21%***	1.22%**	0.46%***	0.50%***	-0.02%	2.11%***	2.23%***	1.86%*	-1.65%***	-1.73%***	-1.88%
P-Value	(0.000)	(0.000)	(0.048)	(0.009)	(0.005)	(0.980)	(0.000)	(0.000)	(0.077)	(0.000)	(0.000)	(0.158)
N	2958	2451	507	912	841	71	849	572	277			
Panel C: Differential												
Mean	-0.13%	-0.04%	-2.49%	1.20%***	1.22%***	0.70%	-2.13%***	-2.05%***	-9.80%			
P-Value	(0.632)	(0.878)	(0.183)	(0.010)	(0.010)	(0.792)	(0.000)	(0.000)	(0.170)			

Table 90: Five-Day CARs by Target Listing Status for Media (0,1)

This table reports the short-term five-day (-2,+2) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The media sample contains all deals where the acquirer was covered in top UK media one month before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Private refers to deals where the target was unlisted; Public refers to deals where the target was listed on a stock exchange. Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Private			Public			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,1)												
Mean	0.98%***	1.06%***	-1.03%	0.83%*	1.03%**	-7.69%	-0.41%	-0.48%	0.05%	1.24%	1.51%	-7.74%
P-Value	(0.000)	(0.000)	(0.651)	(0.067)	(0.017)	(0.270)	(0.589)	(0.567)	(0.979)	(0.161)	(0.108)	(0.283)
N	524	505	19	208	203	5	88	76	12			
Panel B: No Media												
Mean	1.21%***	1.21%***	1.22%**	1.39%***	1.07%***	2.90%**	0.30%	1.44%***	-2.09%***	1.09%***	-0.37%	4.99%***
P-Value	(0.000)	(0.000)	(0.048)	(0.000)	(0.000)	(0.013)	(0.358)	(0.000)	(0.003)	(0.010)	(0.361)	(0.000)
N	2958	2451	507	1249	1029	220	545	369	176			
Panel C: Differential												
Mean	-0.23%	-0.15%	-2.25%	-0.56%	-0.04%	-10.59%	-0.71%	-1.92%**	2.14%			
P-Value	(0.455)	(0.607)	(0.345)	(0.283)	(0.944)	(0.159)	(0.390)	(0.035)	(0.261)			

Table 91: Five-Day CARs by Acquirer Size for Media (0,1)

This table reports the short-term three-day (-2,+2) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The media sample contains all deals where the acquirer was covered in top UK media one month before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small (Large) refers to deals where the acquirer was small (large) as classified by ranking from highest to lowest all deals according to the market value of the acquirer four-weeks before deal announcement, and taking the bottom (top) 30% at small (large). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small			Large			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,1)												
Mean	0.98%***	1.06%***	-1.03%	2.04%***	2.24%***	-1.03%	-0.13%	-0.14%	0.74%	2.17%***	2.38%***	-1.77%
P-Value	(0.000)	(0.000)	(0.651)	(0.000)	(0.000)	(0.651)	(0.742)	(0.723)	(0.802)	(0.002)	(0.001)	(0.619)
N	524	505	19	157	147	19	157	155	2			
Panel B: No Media												
Mean	1.21%***	1.21%***	1.22%**	1.71%***	1.70%***	1.73%	0.93%***	0.91%***	1.11%	0.78%*	0.79%**	0.62%
P-Value	(0.000)	(0.000)	(0.048)	(0.000)	(0.000)	(0.128)	(0.000)	(0.000)	(0.266)	(0.078)	(0.038)	(0.681)
N	2958	2451	507	882	637	245	886	807	79			
Panel C: Differential												
Mean	-0.23%	-0.15%	-2.25%	0.33%	0.54%	-2.76%	-1.06%**	-1.05%**	-0.37%			
P-Value	(0.455)	(0.607)	(0.345)	(0.634)	(0.416)	(0.281)	(0.016)	(0.017)	(0.905)			

Table 92: Five-Day CARs by Relative Size for Media (0,1)

This table reports the short-term five-day (-2,+2) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The media sample contains all deals where the acquirer was covered in top UK media one month before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small Relative Size (Large Relative Size) refers to deals where the deal was of a small relative size (large relative size) for the acquirer as classified by ranking from highest to lowest all deals according to the relative size of the deal (calculated as deal value divided by acquirer market value four-weeks before deal announcement), and taking the bottom (top) 30% at small relative size (large relative size). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small Relative Size			Large Relative Size			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,1)												
Mean	0.98%***	1.06%***	-1.03%	-0.36%	-0.09%	-14.18%	1.60%***	1.64%***	0.95%	-1.96%***	-1.73%**	-15.13%
P-Value	(0.000)	(0.000)	(0.651)	(0.439)	(0.839)	(0.215)	(0.003)	(0.002)	(0.732)	(0.005)	(0.011)	(0.212)
N	524	505	19	157	154	3	157	147	10			
Panel B: No Media												
Mean	1.21%***	1.21%***	1.22%**	0.46%***	0.50%***	-0.02%	2.11%***	2.23%***	1.86%*	-1.65%***	-1.73%***	-1.88%
P-Value	(0.000)	(0.000)	(0.048)	(0.009)	(0.005)	(0.980)	(0.000)	(0.000)	(0.077)	(0.000)	(0.000)	(0.158)
N	2958	2451	507	912	841	71	849	572	277			
Panel C: Differential												
Mean	-0.23%	-0.15%	-2.25%	-0.82%*	-0.59%	-14.16%	-0.51%	-0.59%	-0.91%			
P-Value	(0.455)	(0.607)	(0.345)	(0.097)	(0.199)	(0.217)	(0.444)	(0.358)	(0.761)			

Table 93: Five-Day CARs by Target Listing Status for Media (0,6)

This table reports the short-term five-day (-2,+2) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The media sample contains all deals where the acquirer was covered in top UK media six months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Private refers to deals where the target was unlisted; Public refers to deals where the target was listed on a stock exchange. Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Private			Public			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,6)												
Mean	1.06%***	1.13%***	-1.02%***	1.01%***	1.18%***	-5.71%	-0.11%	-0.10%	-0.20%	1.12%	1.28%	-5.51%
P-Value	(0.000)	(0.000)	(0.000)	(0.005)	(0.001)	(0.238)	(0.870)	(0.896)	(0.901)	(0.150)	(0.130)	(0.273)
N	672	648	24	291	284	7	99	86	13			
Panel B: No Media												
Mean	1.21%***	1.21%***	1.22%**	1.39%***	1.07%***	2.90%**	0.30%	1.44%***	-2.09%***	1.09%***	-0.37%	4.99%***
P-Value	(0.000)	(0.000)	(0.048)	(0.000)	(0.000)	(0.013)	(0.358)	(0.000)	(0.003)	(0.010)	(0.361)	(0.000)
N	2958	2451	507	1249	1029	220	545	369	176			
Panel C: Differential												
Mean	-0.15%	-0.08%	-2.24%	-0.38%	0.11%	-8.61%	-0.41%	-1.54%*	1.89%			
P-Value	(0.577)	(0.778)	(0.243)	(0.400)	(0.794)	(0.105)	(0.590)	(0.067)	(0.287)			

Table 94: Five-Day CARs by Acquirer Size for Media (0,6)

This table reports the short-term three-day (-2,+2) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The media sample contains all deals where the acquirer was covered in top UK media six months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small (Large) refers to deals where the acquirer was small (large) as classified by ranking from highest to lowest all deals according to the market value of the acquirer four-weeks before deal announcement, and taking the bottom (top) 30% at small (large). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small			Large			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,6)												
Mean	1.06%***	1.13%***	-1.02%***	2.22%***	2.41%***	-0.65%	0.10%	0.09%	0.74%	2.12%***	2.32%***	-1.39%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.679)	(0.766)	(0.783)	(0.802)	(0.000)	(0.000)	(0.665)
N	672	648	24	202	189	13	202	200	2			
Panel B: No Media												
Mean	1.21%***	1.21%***	1.22%**	1.71%***	1.70%***	1.73%	0.93%***	0.91%***	1.11%	0.78%*	0.79%**	0.62%
P-Value	(0.000)	(0.000)	(0.048)	(0.000)	(0.000)	(0.128)	(0.000)	(0.000)	(0.266)	(0.078)	(0.038)	(0.681)
N	2958	2451	507	882	637	245	886	807	79			
Panel C: Differential												
Mean	-0.15%	-0.08%	-2.24%	0.51%	0.71%	-2.38%	-0.83%**	-0.82%**	-0.37%			
P-Value	(0.577)	(0.778)	(0.243)	(0.413)	(0.232)	(0.222)	(0.032)	(0.036)	(0.905)			

Table 95: Five-Day CARs by Relative Size for Media (0,6)

This table reports the short-term five-day (-2,+2) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The media sample contains all deals where the acquirer was covered in top UK media six months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small Relative Size (Large Relative Size) refers to deals where the deal was of a small relative size (large relative size) for the acquirer as classified by ranking from highest to lowest all deals according to the relative size of the deal (calculated as deal value divided by acquirer market value four-weeks before deal announcement), and taking the bottom (top) 30% at small relative size (large relative size). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small Relative Size			Large Relative Size			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,6)												
Mean	1.06%***	1.13%***	-1.02%***	-0.06%	0.14%	-7.94%	1.74%***	1.81%***	0.68%	-1.80%***	-1.67%***	-8.62%
P-Value	(0.000)	(0.000)	(0.000)	(0.876)	(0.704)	(0.241)	(0.000)	(0.000)	(0.788)	(0.002)	(0.004)	(0.228)
N	672	648	24	202	197	5	202	191	11			
Panel B: No Media												
Mean	1.21%***	1.21%***	1.22%**	0.46%***	0.50%***	-0.02%	2.11%***	2.23%***	1.86%*	-1.65%***	-1.73%***	-1.88%
P-Value	(0.000)	(0.000)	(0.048)	(0.009)	(0.005)	(0.980)	(0.000)	(0.000)	(0.077)	(0.000)	(0.000)	(0.158)
N	2958	2451	507	912	841	71	849	572	277			
Panel C: Differential												
Mean	-0.15%	-0.08%	-2.24%	-0.52%	-0.36%	-7.92%	-0.37%	-0.42%	-1.18%			
P-Value	(0.577)	(0.778)	(0.243)	(0.222)	(0.371)	(0.246)	(0.549)	(0.460)	(0.666)			

Table 96: Twelve-Month BHARs by Target Listing Status for Media All

This table reports the long-term twelve month (0,+12) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media twelve months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Private refers to deals where the target was unlisted; Public refers to deals where the target was listed on a stock exchange. Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean BHAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Private			Public			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media												
Mean	2.26%	2.85%*	-13.38%	0.54%	1.66%	-45.36%*	-2.79%	-1.65%	-10.04%	3.33%	3.31%	-35.32%
P-Value	(0.120)	(0.051)	(0.181)	(0.816)	(0.473)	(0.069)	(0.397)	(0.629)	(0.374)	(0.409)	(0.422)	(0.162)
N	690	665	25	295	288	7	103	89	14			
Panel B: No Media												
Mean	-8.97%***	-6.47%***	-21.04%***	-10.93%***	-8.76%***	-21.10%***	-12.09%***	-5.90%***	-25.06%***	1.16%	-2.86%	3.96%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.004)	(0.000)	(0.632)	(0.253)	(0.569)
N	2958	2451	507	1249	1029	220	545	369	176			
Panel C: Differential												
Mean	11.23%***	9.32%***	7.66%	11.47%***	10.42%***	-24.26%	9.30%**	4.25%	15.02%			
P-Value	(0.000)	(0.000)	(0.459)	(0.000)	(0.000)	(0.293)	(0.014)	(0.284)	(0.209)			

Table 97: Twelve-Month BHARs by Acquirer Size for Media All

This table reports the long-term twelve month (0,+12) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media twelve months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small (Large) refers to deals where the acquirer was small (large) as classified by ranking from highest to lowest all deals according to the market value of the acquirer four-weeks before deal announcement, and taking the bottom (top) 30% at small (large). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small			Large			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media												
Mean	2.26%	2.85%*	-13.38%	13.42%***	15.13%***	-12.03%	-2.02%	-2.08%	4.69%**	15.44%***	17.21%***	-16.72%
P-Value	(0.120)	(0.051)	(0.181)	(0.000)	(0.000)	(0.395)	(0.255)	(0.245)	(0.021)	(0.000)	(0.000)	(0.243)
N	690	665	25	207	194	13	207	205	2			
Panel B: No Media												
Mean	-8.97%***	-6.47%***	-21.04%***	-9.69%***	-6.55%***	-17.84%***	-6.93%***	-6.25%***	-13.86%**	-2.76%	-0.30%	-3.98%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.000)	(0.000)	(0.015)	(0.262)	(0.902)	(0.608)
N	2958	2451	507	882	637	245	886	807	79			
Panel C: Differential												
Mean	11.23%***	9.32%***	7.66%	23.11%***	21.68%***	5.81%	4.91%**	4.17%*	18.55%***			
P-Value	(0.000)	(0.000)	(0.459)	(0.000)	(0.000)	(0.697)	(0.025)	(0.059)	(0.001)			

Table 98: Twelve-Month BHARs by Relative Size for Media All

This table reports the long-term twelve month (0,+12) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media twelve months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small Relative Size (Large Relative Size) refers to deals where the deal was of a small relative size (large relative size) for the acquirer as classified by ranking from highest to lowest all deals according to the relative size of the deal (calculated as deal value divided by acquirer market value four-weeks before deal announcement), and taking the bottom (top) 30% at small relative size (large relative size). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean BHAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small Relative Size			Large Relative Size			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media												
Mean	2.26%	2.85%*	-13.38%	4.90%	5.02%	2.70%	-4.40%**	-3.27%	-50.13%*	9.30%**	8.29%**	52.83%*
P-Value	(0.120)	(0.051)	(0.181)	(0.106)	(0.105)	(0.861)	(0.034)	(0.104)	(0.067)	(0.011)	(0.025)	(0.068)
N	690	665	25	207	196	11	207	202	5			
Panel B: No Media												
Mean	-8.97%***	-6.47%***	-21.04%***	-9.34%***	-8.42%***	-20.24%***	-8.80%***	-5.31%***	-15.99%***	-0.54%	-3.11%	-4.25%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.008)	(0.000)	(0.010)	(0.001)	(0.828)	(0.209)	(0.626)
N	2958	2451	507	912	841	71	849	572	277			
Panel C: Differential												
Mean	11.23%***	9.32%***	7.66%	14.24%***	13.44%***	22.94%	4.40%	2.04%	-34.14%			
P-Value	(0.000)	(0.000)	(0.459)	(0.000)	(0.000)	(0.191)	(0.132)	(0.477)	(0.173)			

Table 99: Twelve-Month BHARs by Target Listing Status for Media (0,1)

This table reports the long-term twelve month (0,+12) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media one month before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Private refers to deals where the target was unlisted; Public refers to deals where the target was listed on a stock exchange. Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean BHAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Private			Public			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,1)												
Mean	0.74%	1.18%	-10.95%	-0.08%	0.92%	-40.61%	-5.50%	-5.28%	-6.94%	5.42%	6.20%	-33.67%
P-Value	(0.637)	(0.453)	(0.342)	(0.975)	(0.695)	(0.190)	(0.101)	(0.125)	(0.571)	(0.187)	(0.136)	(0.289)
N	524	505	19	208	203	5	88	76	12			
Panel B: No Media												
Mean	-8.97%***	-6.47%***	-21.04%***	-10.93%***	-8.76%***	-21.10%***	-12.09%***	-5.90%***	-25.06%***	1.16%	-2.86%	3.96%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.004)	(0.000)	(0.632)	(0.253)	(0.569)
N	2958	2451	507	1249	1029	220	545	369	176			
Panel C: Differential												
Mean	9.71%***	7.65%***	10.09%	10.85%***	9.68%***	-19.51%	6.59%*	0.62%	18.12%			
P-Value	(0.000)	(0.000)	(0.397)	(0.000)	(0.001)	(0.502)	(0.084)	(0.875)	(0.169)			

Table 100: Twelve-Month BHARs by Acquirer Size for Media (0,1)

This table reports the long-term twelve month (0,+12) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media one month before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small (Large) refers to deals where the acquirer was small (large) as classified by ranking from highest to lowest all deals according to the market value of the acquirer four-weeks before deal announcement, and taking the bottom (top) 30% at small (large). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small			Large			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,1)												
Mean	0.74%	1.18%	-10.95%	8.75%**	10.45%***	-10.95%	-2.55%	-2.64%	4.69%**	11.30%***	13.09%***	-15.64%
P-Value	(0.637)	(0.453)	(0.342)	(0.020)	(0.007)	(0.342)	(0.192)	(0.182)	(0.021)	(0.008)	(0.003)	(0.181)
N	524	505	19	157	147	19	157	155	2			
Panel B: No Media												
Mean	-8.97%***	-6.47%***	-21.04%***	-9.69%***	-6.55%***	-17.84%***	-6.93%***	-6.25%***	-13.86%**	-2.76%	-0.30%	-3.98%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.000)	(0.000)	(0.015)	(0.262)	(0.902)	(0.608)
N	2958	2451	507	882	637	245	886	807	79			
Panel C: Differential												
Mean	9.71%***	7.65%***	10.09%	18.44%***	17.00%***	6.89%	4.38%*	3.61%	18.55%***			
P-Value	(0.000)	(0.000)	(0.397)	(0.000)	(0.000)	(0.585)	(0.061)	(0.127)	(0.001)			

Table 101: Twelve-Month BHARs by Relative Size for Media (0,1)

This table reports the long-term twelve month (0,+12) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media one month before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small Relative Size (Large Relative Size) refers to deals where the deal was of a small relative size (large relative size) for the acquirer as classified by ranking from highest to lowest all deals according to the relative size of the deal (calculated as deal value divided by acquirer market value four-weeks before deal announcement), and taking the bottom (top) 30% at small relative size (large relative size). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean BHAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small Relative Size			Large Relative Size			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,1)												
Mean	0.74%	1.18%	-10.95%	-6.48%***	-5.00%**	-82.35%***	0.27%	0.33%	-0.63%	-6.75%*	-5.33%	-81.72%***
P-Value	(0.637)	(0.453)	(0.342)	(0.006)	(0.024)	(0.001)	(0.929)	(0.914)	(0.970)	(0.076)	(0.155)	(0.001)
N	524	505	19	157	154	3	157	147	10			
Panel B: No Media												
Mean	-8.97%***	-6.47%***	-21.04%***	-9.34%***	-8.42%***	-20.24%***	-8.80%***	-5.31%***	-15.99%***	-0.54%	-3.11%	-4.25%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.008)	(0.000)	(0.010)	(0.001)	(0.828)	(0.209)	(0.626)
N	2958	2451	507	912	841	71	849	572	277			
Panel C: Differential												
Mean	9.71%***	7.65%***	10.09%	2.86%	3.42%	-62.11%***	9.07%**	5.64%	15.36%			
P-Value	(0.000)	(0.000)	(0.397)	(0.291)	(0.188)	(0.000)	(0.013)	(0.125)	(0.384)			

Table 102: Twelve-Month BHARs by Target Listing Status for Media (0,6)

This table reports the long-term twelve month (0,+12) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media six months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Private refers to deals where the target was unlisted; Public refers to deals where the target was listed on a stock exchange. Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean BHAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Private			Public			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,6)												
Mean	2.11%	2.61%	-11.36%	0.61%	1.74%	-45.36%*	-2.54%	-2.00%	-6.06%	3.15%	3.74%	-39.30%
P-Value	(0.153)	(0.153)	(0.153)	(0.797)	(0.457)	(0.069)	(0.450)	(0.569)	(0.591)	(0.444)	(0.375)	(0.125)
N	672	648	24	291	284	7	99	86	13			
Panel B: No Media												
Mean	-8.97%***	-6.47%***	-21.04%***	-10.93%***	-8.76%***	-21.10%***	-12.09%***	-5.90%***	-25.06%***	1.16%	-2.86%	3.96%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.004)	(0.000)	(0.632)	(0.253)	(0.569)
N	2958	2451	507	1249	1029	220	545	369	176			
Panel C: Differential												
Mean	11.08%***	9.08%***	9.68%	11.54%***	10.50%***	-24.26%	9.55%**	3.90%	19.00%			
P-Value	(0.000)	(0.000)	(0.360)	(0.000)	(0.000)	(0.293)	(0.013)	(0.338)	(0.121)			

Table 103: Twelve-Month BHARs by Acquirer Size for Media (0,6)

This table reports the long-term twelve month (0,+12) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media six months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small (Large) refers to deals where the acquirer was small (large) as classified by ranking from highest to lowest all deals according to the market value of the acquirer four-weeks before deal announcement, and taking the bottom (top) 30% at small (large). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small			Large			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,6)												
Mean	2.11%	2.61%	-11.36%	13.28%***	15.03%***	-12.03%	-2.35%	-2.42%	4.69%**	15.63%***	17.45%***	-16.72%
P-Value	(0.153)	(0.153)	(0.153)	(0.000)	(0.000)	(0.395)	(0.187)	(0.178)	(0.021)	(0.000)	(0.000)	(0.243)
N	672	648	24	202	189	13	202	200	2			
Panel B: No Media												
Mean	-8.97%***	-6.47%***	-21.04%***	-9.69%***	-6.55%***	-17.84%***	-6.93%***	-6.25%***	-13.86%**	-2.76%	-0.30%	-3.98%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.000)	(0.000)	(0.015)	(0.262)	(0.902)	(0.608)
N	2958	2451	507	882	637	245	886	807	79			
Panel C: Differential												
Mean	11.08%***	9.08%***	9.68%	22.97%***	21.58%***	5.81%	4.58%**	3.83%*	18.55%***			
P-Value	(0.000)	(0.000)	(0.360)	(0.000)	(0.000)	(0.697)	(0.037)	(0.084)	(0.001)			

Table 104: Twelve-Month BHARs by Relative Size for Media (0,6)

This table reports the long-term twelve month (0,+12) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media six months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small Relative Size (Large Relative Size) refers to deals where the deal was of a small relative size (large relative size) for the acquirer as classified by ranking from highest to lowest all deals according to the relative size of the deal (calculated as deal value divided by acquirer market value four-weeks before deal announcement), and taking the bottom (top) 30% at small relative size (large relative size). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean BHAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small Relative Size			Large Relative Size			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,6)												
Mean	2.11%	2.61%	-11.36%	-4.92%**	-3.77%*	-50.13%*	4.84%	4.97%	2.70%	-9.76%***	-8.74%**	-52.83%*
P-Value	(0.153)	(0.153)	(0.153)	(0.019)	(0.063)	(0.067)	(0.119)	(0.119)	(0.861)	(0.009)	(0.021)	(0.068)
N	672	648	24	202	197	5	202	191	11			
Panel B: No Media												
Mean	-8.97%***	-6.47%***	-21.04%***	-9.34%***	-8.42%***	-20.24%***	-8.80%***	-5.31%***	-15.99%***	-0.54%	-3.11%	-4.25%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.008)	(0.000)	(0.010)	(0.001)	(0.828)	(0.209)	(0.626)
N	2958	2451	507	912	841	71	849	572	277			
Panel C: Differential												
Mean	11.08%***	9.08%***	9.68%	4.42%*	4.65%*	-29.89%	13.64%***	10.28%***	18.69%			
P-Value	(0.000)	(0.000)	(0.360)	(0.079)	(0.058)	(0.221)	(0.000)	(0.007)	(0.260)			

Table 105: Twenty-Four Month BHARs by Target Listing Status for Media All

This table reports the long-term twenty-four month (0,+24) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media twelve months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Private refers to deals where the target was unlisted; Public refers to deals where the target was listed on a stock exchange. Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean BHAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Private			Public			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media												
Mean	0.08%	1.23%	-31.55%	-3.98%	-2.19%	-74.75%**	-8.40%	-2.42%	-49.80%***	4.42%	0.23%	-24.95%
P-Value	(0.970)	(0.581)	(0.108)	(0.218)	(0.493)	(0.020)	(0.120)	(0.665)	(0.002)	(0.480)	(0.971)	(0.381)
N	660	637	23	283	276	7	95	83	12			
Panel B: No Media												
Mean	-19.73%***	-14.77%***	-43.94%***	-23.10%***	-17.56%***	-49.23%***	-22.06%***	-12.28%***	-42.90%***	-1.04%	-5.28%	-6.33%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.762)	(0.173)	(0.394)
N	2902	2409	493	1224	1010	214	532	362	170			
Panel C: Differential												
Mean	19.81%***	16.00%***	12.39%	19.12%***	15.37%***	-25.52%	13.66%**	9.86%	-6.90%			
P-Value	(0.000)	(0.000)	(0.524)	(0.000)	(0.000)	(0.339)	(0.025)	(0.129)	(0.620)			

Table 106: Twenty-Four Month BHARs by Acquirer Size for Media All

This table reports the long-term twenty-four month (0,+24) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media twelve months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small (Large) refers to deals where the acquirer was small (large) as classified by ranking from highest to lowest all deals according to the market value of the acquirer four-weeks before deal announcement, and taking the bottom (top) 30% at small (large). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small			Large			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media												
Mean	0.08%	1.23%	-31.55%	11.60%**	15.59%***	-50.62%**	-5.34%*	-5.33%*	-6.21%	16.94%***	20.92%***	-44.41%*
P-Value	(0.970)	(0.581)	(0.108)	(0.030)	(0.004)	(0.021)	(0.052)	(0.055)	(0.695)	(0.005)	(0.001)	(0.086)
N	660	637	23	199	187	12	197	195	2			
Panel B: No Media												
Mean	-19.73%***	-14.77%***	-43.94%***	-22.62%***	-14.96%***	-42.85%***	-14.21%***	-12.05%***	-35.74%***	-8.41%**	-2.91%	-7.11%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.012)	(0.436)	(0.396)
N	2902	2409	493	856	621	235	867	788	79			
Panel C: Differential												
Mean	19.81%***	16.00%***	12.39%	34.22%***	30.55%***	-7.77%	8.87%***	6.72%**	29.53%			
P-Value	(0.000)	(0.000)	(0.524)	(0.000)	(0.000)	(0.698)	(0.008)	(0.048)	(0.273)			

Table 107: Twenty-Four Month BHARs by Relative Size for Media All

This table reports the long-term twenty-four month (0,+24) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media twelve months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small Relative Size (Large Relative Size) refers to deals where the deal was of a small relative size (large relative size) for the acquirer as classified by ranking from highest to lowest all deals according to the relative size of the deal (calculated as deal value divided by acquirer market value four-weeks before deal announcement), and taking the bottom (top) 30% at small relative size (large relative size). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean BHAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small Relative Size			Large Relative Size			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media												
Mean	0.08%	1.23%	-31.55%	1.88%	1.93%	0.85%	-7.62%**	-5.69%*	-82.69%**	9.50%*	7.62%	83.54%*
P-Value	(0.970)	(0.581)	(0.108)	(0.684)	(0.667)	(0.982)	(0.017)	(0.066)	(0.021)	(0.090)	(0.163)	(0.072)
N	660	637	23	199	189	10	200	195	5			
Panel B: No Media												
Mean	-19.73%***	-14.77%***	-43.94%***	-19.10%***	-17.73%***	-35.06%***	-21.90%***	-13.68%***	-39.12%***	2.80%	-4.05%	4.06%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.406)	(0.283)	(0.674)
N	2902	2409	493	898	827	71	827	560	267			
Panel C: Differential												
Mean	19.81%***	16.00%***	12.39%	20.98%***	19.66%***	35.91%	14.28%***	7.99%*	-43.57%			
P-Value	(0.000)	(0.000)	(0.524)	(0.000)	(0.000)	(0.357)	(0.001)	(0.073)	(0.130)			

Table 108: Twenty-Four Month BHARs by Target Listing Status for Media (0,1)

This table reports the long-term twenty-four month (0,+24) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media one month before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Private refers to deals where the target was unlisted; Public refers to deals where the target was listed on a stock exchange. Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean BHAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Private			Public			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,1)												
Mean	-0.51%	0.39%	-26.44%	-2.51%	-1.22%	-53.45%	-15.50%***	-10.58%**	-50.44%***	12.99%**	9.36%	-3.01%
P-Value	(0.841)	(0.877)	(0.266)	(0.518)	(0.753)	(0.131)	(0.003)	(0.050)	(0.005)	(0.045)	(0.157)	(0.927)
N	505	488	17	202	197	5	81	71	10			
Panel B: No Media												
Mean	-19.73%***	-14.77%***	-43.94%***	-23.10%***	-17.56%***	-49.23%***	-22.06%***	-12.28%***	-42.90%***	-1.04%	-5.28%	-6.33%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.762)	(0.173)	(0.394)
N	2902	2409	493	1224	1010	214	532	362	170			
Panel C: Differential												
Mean	19.22%***	15.16%***	17.50%	20.59%***	16.34%***	-4.22%	6.56%	1.70%	-7.54%			
P-Value	(0.000)	(0.000)	(0.461)	(0.000)	(0.000)	(0.890)	(0.263)	(0.786)	(0.609)			

Table 109: Twenty-Four Month BHARs by Acquirer Size for Media (0,1)

This table reports the long-term twenty-four month (0,+24) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media one month before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small (Large) refers to deals where the acquirer was small (large) as classified by ranking from highest to lowest all deals according to the market value of the acquirer four-weeks before deal announcement, and taking the bottom (top) 30% at small (large). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small			Large			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,1)												
Mean	-0.51%	0.39%	-26.44%	9.08%	13.14%**	-26.44%	-5.67%*	-5.67%*	-6.21%	14.75%**	18.81%***	-20.23%
P-Value	(0.841)	(0.877)	(0.266)	(0.136)	(0.036)	(0.266)	(0.067)	(0.071)	(0.695)	(0.031)	(0.007)	(0.450)
N	505	488	17	152	143	17	148	146	2			
Panel B: No Media												
Mean	-19.73%***	-14.77%***	-43.94%***	-22.62%***	-14.96%***	-42.85%***	-14.21%***	-12.05%***	-35.74%***	-8.41%**	-2.91%	-7.11%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.012)	(0.436)	(0.396)
N	2902	2409	493	856	621	235	867	788	79			
Panel C: Differential												
Mean	19.22%***	15.16%***	17.50%	31.70%***	28.10%***	16.41%	8.54%**	6.38%*	29.53%			
P-Value	(0.000)	(0.000)	(0.461)	(0.000)	(0.000)	(0.496)	(0.019)	(0.084)	(0.273)			

Table 110: Twenty-Four Month BHARs by Relative Size for Media (0,1)

This table reports the long-term twenty-four month (0,+24) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media one month before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small Relative Size (Large Relative Size) refers to deals where the deal was of a small relative size (large relative size) for the acquirer as classified by ranking from highest to lowest all deals according to the relative size of the deal (calculated as deal value divided by acquirer market value four-weeks before deal announcement), and taking the bottom (top) 30% at small relative size (large relative size). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean BHAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small Relative Size			Large Relative Size			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,1)												
Mean	-0.51%	0.39%	-26.44%	-9.65%***	-7.88%**	-97.29%**	-3.48%	-3.23%	-7.40%	-6.17%	-4.65%	-89.89%*
P-Value	(0.841)	(0.877)	(0.266)	(0.005)	(0.018)	(0.025)	(0.498)	(0.511)	(0.855)	(0.317)	(0.433)	(0.063)
N	505	488	17	152	149	3	150	141	9			
Panel B: No Media												
Mean	-19.73%***	-14.77%***	-43.94%***	-19.10%***	-17.73%***	-35.06%***	-21.90%***	-13.68%***	-39.12%***	2.80%	-4.05%	4.06%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.406)	(0.283)	(0.674)
N	2902	2409	493	898	827	71	827	560	267			
Panel C: Differential												
Mean	19.22%***	15.16%***	17.50%	9.45%**	9.85%**	-62.23%**	18.42%***	10.45%*	31.72%			
P-Value	(0.000)	(0.000)	(0.461)	(0.016)	(0.011)	(0.039)	(0.002)	(0.076)	(0.446)			

Table 111: Twenty-Four Month BHARs by Target Listing Status for Media (0,6)

This table reports the long-term twenty-four month (0,+24) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media six months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Private refers to deals where the target was unlisted; Public refers to deals where the target was listed on a stock exchange. Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean BHAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Private			Public			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,6)												
Mean	-0.49%	0.50%	-28.61%	-3.97%	-2.15%	-74.75%**	-8.75%	-3.69%	-45.57%***	4.78%	1.54%	-29.18%
P-Value	(0.829)	(0.829)	(0.829)	(0.224)	(0.504)	(0.020)	(0.111)	(0.520)	(0.006)	(0.452)	(0.815)	(0.312)
N	644	622	22	279	272	7	91	80	11			
Panel B: No Media												
Mean	-19.73%***	-14.77%***	-43.94%***	-23.10%***	-17.56%***	-49.23%***	-22.06%***	-12.28%***	-42.90%***	-1.04%	-5.28%	-6.33%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.762)	(0.173)	(0.394)
N	2902	2409	493	1224	1010	214	532	362	170			
Panel C: Differential												
Mean	19.24%***	15.27%***	15.33%	19.13%***	15.41%***	-25.52%	13.31%**	8.59%	-2.67%			
P-Value	(0.000)	(0.000)	(0.446)	(0.000)	(0.000)	(0.339)	(0.031)	(0.195)	(0.852)			

Table 112: Twenty-Four Month BHARs by Acquirer Size for Media (0,6)

This table reports the long-term twenty-four month (0,+24) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media six months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small (Large) refers to deals where the acquirer was small (large) as classified by ranking from highest to lowest all deals according to the market value of the acquirer four-weeks before deal announcement, and taking the bottom (top) 30% at small (large). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean CAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small			Large			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,6)												
Mean	-0.49%	0.50%	-28.61%	12.03%**	16.14%***	-50.62%**	-5.76%**	-5.76%**	-6.21%	17.79%***	21.90%***	-44.41%*
P-Value	(0.829)	(0.829)	(0.829)	(0.027)	(0.004)	(0.021)	(0.037)	(0.039)	(0.695)	(0.004)	(0.000)	(0.086)
N	644	622	22	195	183	12	192	190	2			
Panel B: No Media												
Mean	-19.73%***	-14.77%***	-43.94%***	-22.62%***	-14.96%****	-42.85%***	-14.21%***	-12.05%***	-35.74%***	-8.41%**	-2.91%	-7.11%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.012)	(0.436)	(0.396)
N	2902	2409	493	856	621	235	867	788	79			
Panel C: Differential												
Mean	19.24%***	15.27%***	15.33%	34.65%***	31.10%***	-7.77%	8.45%**	6.29%*	29.53%			
P-Value	(0.000)	(0.000)	(0.446)	(0.000)	(0.000)	(0.698)	(0.011)	(0.064)	(0.273)			

Table 113: Twenty-Four Month BHARs by Relative Size for Media (0,6)

This table reports the long-term twenty-four month (0,+24) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The media sample contains all deals where the acquirer was covered in top UK media six months before announcement as defined in Section 5.2.1, while those deals in the no media sample contain the remaining deals whereby the acquirer was not covered in top UK media. All refers to all deals in the respective samples; Small Relative Size (Large Relative Size) refers to deals where the deal was of a small relative size (large relative size) for the acquirer as classified by ranking from highest to lowest all deals according to the relative size of the deal (calculated as deal value divided by acquirer market value four-weeks before deal announcement), and taking the bottom (top) 30% at small relative size (large relative size). Cash (stock) refers to deals where the deal was financed 100% using cash (stock). The mean BHAR is reported with the corresponding p-value shown in parentheses. N refers to the number of observations in each sample. We control for the different sample sizes in Panel C. Statistical significance is denoted at the 1%, 5% and 10% level as ***, ** and * respectively.

	All			Small Relative Size			Large Relative Size			Differential		
	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock	All	Cash	Stock
Panel A: Media (0,6)												
Mean	-0.49%	0.50%	-28.61%	-8.54%*	-6.59%**	-82.69%**	1.26%	1.29%	0.85%	-9.80%*	-7.88%	-83.54%*
P-Value	(0.829)	(0.829)	(0.829)	(0.070)	(0.033)	(0.021)	(0.789)	(0.780)	(0.982)	(0.085)	(0.155)	(0.072)
N	644	622	22	195	190	5	194	184	10			
Panel B: No Media												
Mean	-19.73%***	-14.77%***	-43.94%***	-19.10%***	-17.73%***	-35.06%***	-21.90%***	-13.68%***	-39.12%***	2.80%	-4.05%	4.06%
P-Value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.406)	(0.283)	(0.674)
N	2902	2409	493	898	827	71	827	560	267			
Panel C: Differential												
Mean	19.24%***	15.27%***	15.33%	10.56%***	11.14%***	-47.63%	23.16%***	14.97%***	39.97%			
P-Value	(0.000)	(0.000)	(0.446)	(0.005)	(0.002)	(0.102)	(0.000)	(0.008)	(0.301)			

Table 114: Five-Day Cross Sectional Analysis for Media All

This table reports the results of the cross-sectional analysis for the short-term. The short-term is modelled using five-day (-2,+2) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The independent variables are as follows: *Tier One Media Exposure* is a binary variable that takes the value of 1 if the acquirer was covered in top UK media twelve months before announcement as defined in Section 5.2.1; *Media Coverage* is the number of articles covering the acquiring in top UK media twelve months before announcement as defined in Section 5.2; *Media Attitude* is the level of pessimism regarding the bidder around the event window, as defined in Section 5.2; *Positive (Negative) Words in Title* is the number of positive (negative) words in the titles of the articles covering the acquirer in top UK media twelve months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Positive (Negative) Words in Content* is the number of positive (negative) words in the content of the articles covering the acquirer in top UK media twelve months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Ln(Size)* is the logarithm of the acquirer's market value as measured one month before announcement; *Relative Size* is calculated as the deal value divided by the market value of the acquirer, as measured one month before announcement; *Run-Up* is the CAR of the acquirer over a (-300,-3) window; *Hostile* is a binary variable that takes the value of 1 if the acquirer uses hostile approach techniques; *Foreign Target* is a binary variable that takes the value of 1 if the target is located outside of the UK; *Competition* is a binary variable that takes the value of 1 if there was more than one offer for the target; *Public Target* is a binary variable that takes the value of 1 if the target is listed on a stock exchange; *Cash(Stock)* is a binary variable that takes the value of 1 if the deal is financed 100% using cash(stock); *Unrelated Target* is a binary variable that takes the value of 1 if the target is in a different to that of the acquirer as measured using the two-digit primary SIC code; *Time Interval* measures the number of days between the announcement and completion dates. The possible existence of homoscedasticity is controlled for, with the p-values reported in parentheses using robust standard errors. Statistical significance at the 1%, 5% and 10% levels are denoted ***, ** and * respectively.

	1	2	3	4	5	6	7
Tier One Media Exposure	0.0028 (0.309)						
Media Coverage		-0.0001 (0.921)					
Media Attitude			0.2275 (0.430)				
Postive Words in Title				0.0001 (0.527)			
Negative Words in Title					0.0001 (0.318)		
Positive Words in Content						0.0000 (0.500)	
Negative Words in Content							0.0000 (0.320)
Ln (Size)	-0.0087 (0.000)***	-0.0148 (0.001)***	-0.0161 (0.000)***	-0.0157 (0.000)***	-0.0164 (0.000)***	-0.0161 (0.000)***	-0.0166 (0.000)***
Relative Size	0.0000 (0.116)	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***
Run-Up	0.0059 (0.240)	-0.0034 (0.697)	-0.0012 (0.892)	-0.0034 (0.701)	-0.0031 (0.726)	-0.0033 (0.710)	-0.0031 (0.725)
Hostile	-0.0224 (0.130)						
Foreign Acquisition	0.0041 (0.149)	-0.0023 (0.612)	-0.0018 (0.706)	-0.0022 (0.630)	-0.0019 (0.692)	-0.0021 (0.650)	-0.0019 (0.676)
Competition	-0.0141 (0.290)	0.0022 (0.946)	0.0028 (0.931)	0.0027 (0.934)	0.0035 (0.915)	0.0031 (0.924)	0.0038 (0.909)
Public Target	-0.0095 (0.012)**	-0.0112 (0.183)	-0.0121 (0.149)	-0.0113 (0.179)	-0.0114 (0.175)	-0.0114 (0.176)	-0.0116 (0.168)
Cash (Stock)	0.0046 (0.466)	0.0286 (0.130)	0.0284 (0.132)	0.0286 (0.132)	0.0285 (0.134)	0.0285 (0.133)	0.0284 (0.135)
Unrelated Target	-0.0011 (0.683)	0.0002 (0.962)	0.0003 (0.954)	0.0002 (0.955)	0.0003 (0.946)	0.0003 (0.948)	0.0003 (0.941)
Time Interval	0.0001 (0.026)**	0.0001 (0.005)***	0.0001 (0.002)***	0.0001 (0.006)***	0.0001 (0.007)***	0.0001 (0.006)***	0.0001 (0.006)***
Constant	0.0259 (0.001)***	0.0258 (0.192)	0.0274 (0.157)	0.0275 (0.165)	0.0290 (0.139)	0.0283 (0.151)	0.0295 (0.135)
N	3415	676	671	676	676	676	676
F-Stat	3.96 (0.000)***	9.40 (0.000)***	9.62 (0.000)***	9.23 (0.000)***	9.15 (0.000)***	9.06 (0.000)***	9.10 (0.000)***
R-Squared	0.01	0.05	0.05	0.05	0.05	0.05	0.05

Table 115: Twelve-Month Cross Sectional Analysis for Media All

This table reports the results of the cross-sectional analysis for the long-term. The long-term is modelled using long-term twelve month (0,+12) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The independent variables are as follows: *Tier One Media Exposure* is a binary variable that takes the value of 1 if the acquirer was covered in top UK media twelve months before announcement as defined in Section 5.2.1; *Media Coverage* is the number of articles covering the acquiring in top UK media twelve months before announcement as defined in Section 5.2; *Media Attitude* is the level of pessimism regarding the bidder around the event window, as defined in Section 5.2; *Positive (Negative) Words in Title* is the number of positive (negative) words in the titles of the articles covering the acquirer in top UK media twelve months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Positive (Negative) Words in Content* is the number of positive (negative) words in the content of the articles covering the acquirer in top UK media twelve months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Ln(Size)* is the logarithm of the acquirer's market value as measured one month before announcement; *Relative Size* is calculated as the deal value divided by the market value of the acquirer, as measured one month before announcement; *Run-Up* is the CAR of the acquirer over a (-300,-3) window; *Hostile* is a binary variable that takes the value of 1 if the acquirer uses hostile approach techniques; *Foreign Target* is a binary variable that takes the value of 1 if the target is located outside of the UK; *Competition* is a binary variable that takes the value of 1 if there was more than one offer for the target; *Public Target* is a binary variable that takes the value of 1 if the target is listed on a stock exchange; *Cash(Stock)* is a binary variable that takes the value of 1 if the deal is financed 100% using cash(stock); *Unrelated Target* is a binary variable that takes the value of 1 if the target is in a different to that of the acquirer as measured using the two-digit primary SIC code; *Time Interval* measures the number of days between the announcement and completion dates. The possible existence of homoscedasticity is controlled for, with the p-values reported in parentheses using robust standard errors. Statistical significance at the 1%, 5% and 10% levels are denoted ***, ** and * respectively.

	1	2	3	4	5	6	7
Tier One Media Exposure	0.0888 (0.000)***						
Media Coverage		-0.0001 (0.980)					
Media Attitude			2.5339 (0.210)				
Postive Words in Title				-0.0007 (0.378)			
Negative Words in Title					0.0001 (0.895)		
Positive Words in Content						0.0000 (0.245)	
Negative Words in Content							0.0000 (0.374)
Ln (Size)	-0.0096 (0.356)	-0.0816 (0.003)***	-0.0884 (0.000)***	-0.0757 (0.003)***	-0.0833 (0.002)***	-0.0732 (0.005)***	-0.0756 (0.003)***
Relative Size	0.0000 (0.122)	0.0004 (0.610)	0.0004 (0.635)	0.0004 (0.604)	0.0004 (0.611)	0.0004 (0.596)	0.0004 (0.600)
Run-Up	0.0461 (0.032)**	0.0237 (0.638)	0.0353 (0.502)	0.0234 (0.643)	0.0240 (0.635)	0.0226 (0.655)	0.0224 (0.658)
Hostile	-0.0299 (0.783)						
Foreign Acquisition	-0.0192 (0.282)	-0.0280 (0.358)	-0.0250 (0.425)	-0.0290 (0.343)	-0.0275 (0.372)	-0.0299 (0.330)	-0.0297 (0.335)
Competition	-0.0189 (0.815)	0.2852 (0.130)	0.2928 (0.118)	0.2802 (0.140)	0.2865 (0.129)	0.2768 (0.144)	0.2783 (0.141)
Public Target	-0.0115 (0.582)	-0.0309 (0.445)	-0.0368 (0.364)	-0.0298 (0.461)	-0.0311 (0.442)	-0.0291 (0.472)	-0.0290 (0.474)
Cash (Stock)	0.1675 (0.000)***	0.1916 (0.065)*	0.1882 (0.068)*	0.1920 (0.064)*	0.1916 (0.065)*	0.1927 (0.063)*	0.1928 (0.063)*
Unrelated Target	-0.0201 (0.200)	0.0165 (0.569)	0.0153 (0.601)	0.0161 (0.580)	0.0166 (0.568)	0.0158 (0.587)	0.0160 (0.583)
Time Interval	0.0002 (0.286)	0.0004 (0.053)**	0.0005 (0.042)**	0.0004 (0.048)**	0.0004 (0.057)*	0.0004 (0.046)**	0.0004 (0.047)**
Constant	-0.1969 (0.000)***	0.0590 (0.610)	0.0685 (0.554)	0.0451 (0.701)	0.0624 (0.600)	0.0389 *0.743)	0.0441 (0.709)
N	3415	676	671	676	676	676	676
F-Stat	7.01 (0.000)***	2.34 (0.010)***	2.45 (0.007)***	2.53 (0.005)***	2.34 (0.010)***	2.76 (0.003)***	2.61 (0.004)***
R-Squared	0.03	0.03	0.04	0.04	0.03	0.04	0.04

Table 116: Twenty-Four Month Cross Sectional Analysis for Media All

This table reports the results of the cross-sectional analysis for the long-term. The long-term is modelled using long-term twenty-four month (0,+24) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The independent variables are as follows: *Tier One Media Exposure* is a binary variable that takes the value of 1 if the acquirer was covered in top UK media twelve months before announcement as defined in Section 5.2.1; *Media Coverage* is the number of articles covering the acquiring in top UK media twelve months before announcement as defined in Section 5.2; *Media Attitude* is the level of pessimism regarding the bidder around the event window, as defined in Section 5.2; *Positive (Negative) Words in Title* is the number of positive (negative) words in the titles of the articles covering the acquirer in top UK media twelve months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Positive (Negative) Words in Content* is the number of positive (negative) words in the content of the articles covering the acquirer in top UK media twelve months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Ln(Size)* is the logarithm of the acquirer's market value as measured one month before announcement; *Relative Size* is calculated as the deal value divided by the market value of the acquirer, as measured one month before announcement; *Run-Up* is the CAR of the acquirer over a (-300,-3) window; *Hostile* is a binary variable that takes the value of 1 if the acquirer uses hostile approach techniques; *Foreign Target* is a binary variable that takes the value of 1 if the target is located outside of the UK; *Competition* is a binary variable that takes the value of 1 if there was more than one offer for the target; *Public Target* is a binary variable that takes the value of 1 if the target is listed on a stock exchange; *Cash(Stock)* is a binary variable that takes the value of 1 if the deal is financed 100% using cash(stock); *Unrelated Target* is a binary variable that takes the value of 1 if the target is in a different to that of the acquirer as measured using the two-digit primary SIC code; *Time Interval* measures the number of days between the announcement and completion dates. The possible existence of homoscedasticity is controlled for, with the p-values reported in parentheses using robust standard errors. Statistical significance at the 1%, 5% and 10% levels are denoted ***, ** and * respectively.

	1	2	3	4	5	6	7
Tier One Media Exposure	0.1433 (0.000)***						
Media Coverage		0.0136 (0.094)*					
Media Attitude			5.4816 (0.044)**				
Postive Words in Title				0.0003 (0.761)			
Negative Words in Title					0.0007 (0.310)		
Positive Words in Content						0.0000 (0.552)	
Negative Words in Content							0.0000 (0.505)
Ln (Size)	0.0017 (0.907)	-0.1545 (0.002)***	-0.1230 (0.002)***	-0.1110 (0.008)***	-0.1244 (0.005)***	-0.1170 (0.008)***	-0.1177 (0.007)***
Relative Size	0.0000 (0.000)***	-0.0002 (0.604)	-0.0003 (0.369)	-0.0003 (0.470)	-0.0003 (0.447)	-0.0003 (0.461)	-0.0003 (0.459)
Run-Up	0.0404 (0.207)	0.0517 (0.474)	0.0789 (0.294)	0.0488 (0.499)	0.0529 (0.466)	0.0498 (0.491)	0.0505 (0.486)
Hostile	0.0731 (0.675)						
Foreign Acquisition	-0.0517 (0.034)**	-0.1101 (0.017)**	-0.1023 (0.029)**	-0.1104 (0.017)**	-0.1054 (0.024)**	-0.1090 (0.019)**	-0.1085 (0.019)**
Competition	0.0075 (0.955)	0.5260 (0.000)***	0.5533 (0.000)***	0.5359 (0.000)***	0.5507 (0.000)***	0.5420 (0.000)***	0.5440 (0.000)***
Public Target	-0.0011 (0.971)	-0.0767 (0.276)	-0.0943 (0.176)	-0.0769 (0.275)	-0.0792 (0.260)	-0.0782 (0.268)	-0.0792 (0.261)
Cash (Stock)	0.2855 (0.000)***	0.3893 (0.052)*	0.3604 (0.081)*	0.3764 (0.068)*	0.3751 (0.069)*	0.3758 (0.069)*	0.3753 (0.069)*
Unrelated Target	-0.0760 (0.001)***	0.0352 (0.418)	0.0303 (0.483)	0.0342 (0.431)	0.0355 (0.414)	0.0350 (0.421)	0.0351 (0.419)
Time Interval	0.0001 (0.306)	0.0007 (0.046)**	0.0009 (0.021)**	0.0008 (0.038)**	0.0007 (0.055)*	0.0008 (0.041)**	0.0008 (0.043)**
Constant	-0.3863 (0.000)***	-0.0247 (0.910)	-0.0181 (0.933)	-0.0421 (0.848)	-0.0114 (0.959)	-0.0285 (0.041)**	-0.0263 (0.906)
N	3329	646	642	646	646	646	646
F-Stat	11.90 (0.000)***	4.81 (0.000)***	5.48 (0.000)***	4.93 (0.000)***	4.93 (0.000)***	4.88 (0.000)***	4.87 (0.000)***
R-Squared	0.04	0.05	0.06	0.05	0.05	0.05	0.05

Table 117: Five-Day Cross Sectional Analysis for Media (0,1)

This table reports the results of the cross-sectional analysis for the short-term. The short-term is modelled using five-day (-2,+2) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The independent variables are as follows: *Tier One Media Exposure* is a binary variable that takes the value of 1 if the acquirer was covered in top UK media one month before announcement as defined in Section 5.2.1; *Media Coverage* is the number of articles covering the acquiring in top UK media one month before announcement as defined in Section 5.2; *Media Attitude* is the level of pessimism regarding the bidder around the event window, as defined in Section 5.2; *Positive (Negative) Words in Title* is the number of positive (negative) words in the titles of the articles covering the acquirer in top UK media one months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Positive (Negative) Words in Content* is the number of positive (negative) words in the content of the articles covering the acquirer in top UK media one months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Ln(Size)* is the logarithm of the acquirer's market value as measured one month before announcement; *Relative Size* is calculated as the deal value divided by the market value of the acquirer, as measured one month before announcement; *Run-Up* is the CAR of the acquirer over a (-300,-3) window; *Hostile* is a binary variable that takes the value of 1 if the acquirer uses hostile approach techniques; *Foreign Target* is a binary variable that takes the value of 1 if the target is located outside of the UK; *Competition* is a binary variable that takes the value of 1 if there was more than one offer for the target; *Public Target* is a binary variable that takes the value of 1 if the target is listed on a stock exchange; *Cash(Stock)* is a binary variable that takes the value of 1 if the deal is financed 100% using cash(stock); *Unrelated Target* is a binary variable that takes the value of 1 if the target is in a different to that of the acquirer as measured using the two-digit primary SIC code; *Time Interval* measures the number of days between the announcement and completion dates. The possible existence of homoscedasticity is controlled for, with the p-values reported in parentheses using robust standard errors. Statistical significance at the 1%, 5% and 10% levels are denoted ***, ** and * respectively.

	1	2	3	4	5	6	7
Tier One Media Exposure	0.0028 (0.309)						
Media Coverage		-0.0094 (0.084)*					
Media Attitude			0.4455 (0.061)*				
Positive Words in Title				0.0015 (0.047)**			
Negative Words in Title					0.0001 (0.754)		
Positive Words in Content						0.0000 (0.121)	
Negative Words in Content							0.0000 (0.195)
Ln (Size)	-0.0087 (0.000)***	-0.0126 (0.004)***	-0.0123 (0.011)**	-0.0181 (0.000)***	-0.0162 (0.000)***	-0.0184 (0.000)***	-0.0178 (0.000)***
Relative Size	0.0000 (0.116)	0.0001 (0.000)***	0.0002 (0.144)	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***
Run-Up	0.0059 (0.240)	-0.0068 (0.511)	0.0090 (0.437)	-0.0065 (0.535)	-0.0064 (0.541)	-0.0062 (0.555)	-0.0060 (0.568)
Hostile	-0.0224 (0.130)						
Foreign Acquisition	0.0041 (0.149)	-0.0065 (0.216)	-0.0006 (0.923)	-0.0054 (0.307)	0.0060 (0.265)	-0.0053 (0.314)	-0.0055 (0.304)
Competition	-0.0141 (0.290)	0.0063 (0.847)	-0.0101 (0.826)	0.0081 (0.812)	0.0067 (0.846)	0.0077 (0.823)	0.0076 (0.825)
Public Target	-0.0095 (0.012)**	-0.0147 (0.128)	-0.0115 (0.311)	-0.0143 (0.140)	-0.0146 (0.134)	-0.0147 (0.130)	-0.0148 (0.128)
Cash (Stock)	0.0046 (0.466)	0.0237 (0.328)	0.0309 (0.340)	0.0243 (0.321)	0.0246 (0.315)	0.0243 (0.321)	0.0243 (0.320)
Unrelated Target	-0.0011 (0.683)	-0.0009 (0.861)	0.0006 (0.913)	-0.0014 (0.782)	-0.0015 (0.766)	-0.0013 (0.807)	-0.0014 (0.779)
Time Interval	0.0001 (0.026)**	0.0001 (0.003)***	0.0001 (0.094)*	0.0001 (0.007)***	0.0001 (0.005)***	0.0001 (0.006)***	0.0001 (0.006)***
Constant	0.0259 (0.001)***	0.0416 (0.101)	0.0102 (0.761)	0.0408 (0.117)	0.0366 (0.157)	0.0415 (0.112)	0.0402 (0.121)
N	3415	540	342	540	540	540	540
F-Stat	3.96 (0.000)***	12.14 (0.000)***	2.03 (0.030)**	9.64 (0.000)***	9.44 (0.000)***	8.23 (0.000)***	9.36 (0.000)***
R-Squared	0.01	0.06	0.06	0.06	0.06	0.06	0.06

Table 118: Twelve-Month Cross Sectional Analysis for Media (0,1)

This table reports the results of the cross-sectional analysis for the long-term. The long-term is modelled using long-term twelve month (0,+12) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The independent variables are as follows: *Tier One Media Exposure* is a binary variable that takes the value of 1 if the acquirer was covered in top UK media one month before announcement as defined in Section 5.2.1; *Media Coverage* is the number of articles covering the acquiring in top UK media one month before announcement as defined in Section 5.2; *Media Attitude* is the level of pessimism regarding the bidder around the event window, as defined in Section 5.2; *Positive (Negative) Words in Title* is the number of positive (negative) words in the titles of the articles covering the acquirer in top UK media one month before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Positive (Negative) Words in Content* is the number of positive (negative) words in the content of the articles covering the acquirer in top UK media one month before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Ln(Size)* is the logarithm of the acquirer's market value as measured one month before announcement; *Relative Size* is calculated as the deal value divided by the market value of the acquirer, as measured one month before announcement; *Run-Up* is the CAR of the acquirer over a (-300,-3) window; *Hostile* is a binary variable that takes the value of 1 if the acquirer uses hostile approach techniques; *Foreign Target* is a binary variable that takes the value of 1 if the target is located outside of the UK; *Competition* is a binary variable that takes the value of 1 if there was more than one offer for the target; *Public Target* is a binary variable that takes the value of 1 if the target is listed on a stock exchange; *Cash(Stock)* is a binary variable that takes the value of 1 if the deal is financed 100% using cash(stock); *Unrelated Target* is a binary variable that takes the value of 1 if the target is in a different to that of the acquirer as measured using the two-digit primary SIC code; *Time Interval* measures the number of days between the announcement and completion dates. The possible existence of homoscedasticity is controlled for, with the p-values reported in parentheses using robust standard errors. Statistical significance at the 1%, 5% and 10% levels are denoted ***, ** and * respectively.

	1	2	3	4	5	6	7
Tier One Media Exposure	0.0888						
	(0.000)***						
Media Coverage		-0.0121					
		(0.721)					
Media Attitude			0.7165				
			(0.719)				
Positive Words in Title				0.0003			
				(0.968)			
Negative Words in Title					-0.0005		
					(0.824)		
Positive Words in Content						-0.0001	
						(0.453)	
Negative Words in Content							-0.0001
							(0.465)
Ln (Size)	-0.0096	-0.0575	-0.0504	-0.0621	-0.0598	-0.0549	-0.0560
	(0.356)	(0.030)**	(0.179)	(0.021)**	(0.024)**	(0.044)**	(0.036)**
Relative Size	0.0000	0.0005	-0.0023	0.0005	0.0005	0.0005	0.0005
	(0.122)	(0.501)	(0.000)***	(0.507)	(0.506)	(0.488)	(0.499)
Run-Up	0.0461	0.0641	0.0892	0.0645	0.0639	0.0636	0.0629
	(0.032)**	(0.258)	(0.198)	(0.256)	(0.261)	(0.263)	(0.269)
Hostile	-0.0299						
	(0.783)						
Foreign Acquisition	-0.0192	-0.0437	-0.0023	-0.0430	-0.0438	-0.0451	-0.0449
	(0.282)	(0.160)	(0.955)	(0.169)	(0.165)	(0.153)	(0.155)
Competition	-0.0189	0.2833	0.0886	0.2838	0.2824	0.2800	0.2800
	(0.815)	(0.132)	(0.064)*	(0.128)	(0.129)	(0.135)	(0.134)
Public Target	-0.0115	-0.0340	-0.0628	-0.0338	-0.0339	-0.0335	-0.0332
	(0.582)	(0.428)	(0.219)	(0.433)	(0.431)	(0.435)	(0.440)
Cash (Stock)	0.1675	0.1248	0.2046	0.1260	0.1263	0.1270	0.1270
	(0.000)***	(0.298)	(0.145)	(0.292)	(0.290)	(0.288)	(0.288)
Unrelated Target	-0.0201	0.0276	0.0186	0.0268	0.0267	0.0260	0.0265
	(0.200)	(0.376)	(0.628)	(0.388)	(0.389)	(0.402)	(0.393)
Time Interval	0.0002	0.0002	0.0000	0.0002	0.0002	0.0002	0.0002
	(0.286)	(0.337)	(0.926)	(0.344)	(0.337)	(0.318)	(0.322)
Constant	-0.1969	0.0673	-0.0701	0.0607	0.0555	0.0447	0.0468
	(0.000)***	(0.620)	(0.662)	(0.656)	(0.682)	(0.743)	(0.730)
N	3415	540	342	540	540	540	540
F-Stat	7.01	1.71	5.54	1.65	1.70	1.85	1.82
	(0.000)***	(0.076)*	(0.000)***	(0.089)*	(0.078)*	(0.050)**	(0.054)*
R-Squared	0.03	0.04	0.04	0.04	0.04	0.04	0.04

Table 119: Twenty-Four Month Cross Sectional Analysis for Media (0,1)

This table reports the results of the cross-sectional analysis for the long-term. The long-term is modelled using long-term twenty-four month (0,+24) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The independent variables are as follows: *Tier One Media Exposure* is a binary variable that takes the value of 1 if the acquirer was covered in top UK media one month before announcement as defined in Section 5.2.1; *Media Coverage* is the number of articles covering the acquiring in top UK media one month before announcement as defined in Section 5.2; *Media Attitude* is the level of pessimism regarding the bidder around the event window, as defined in Section 5.2; *Positive (Negative) Words in Title* is the number of positive (negative) words in the titles of the articles covering the acquirer in top UK media one month before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Positive (Negative) Words in Content* is the number of positive (negative) words in the content of the articles covering the acquirer in top UK media one month before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Ln(Size)* is the logarithm of the acquirer's market value as measured one month before announcement; *Relative Size* is calculated as the deal value divided by the market value of the acquirer, as measured one month before announcement; *Run-Up* is the CAR of the acquirer over a (-300,-3) window; *Hostile* is a binary variable that takes the value of 1 if the acquirer uses hostile approach techniques; *Foreign Target* is a binary variable that takes the value of 1 if the target is located outside of the UK; *Competition* is a binary variable that takes the value of 1 if there was more than one offer for the target; *Public Target* is a binary variable that takes the value of 1 if the target is listed on a stock exchange; *Cash(Stock)* is a binary variable that takes the value of 1 if the deal is financed 100% using cash(stock); *Unrelated Target* is a binary variable that takes the value of 1 if the target is in a different to that of the acquirer as measured using the two-digit primary SIC code; *Time Interval* measures the number of days between the announcement and completion dates. The possible existence of homoscedasticity is controlled for, with the p-values reported in parentheses using robust standard errors. Statistical significance at the 1%, 5% and 10% levels are denoted ***, ** and * respectively.

	1	2	3	4	5	6	7
Tier One Media Exposure	0.0888 (0.000)***						
Media Coverage		-0.0121 (0.721)					
Media Attitude			0.7165 (0.719)				
Positive Words in Title				0.0003 (0.968)			
Negative Words in Title					-0.0005 (0.824)		
Positive Words in Content						-0.0001 (0.453)	
Negative Words in Content							-0.0001 (0.465)
Ln (Size)	-0.0096 (0.356)	-0.0575 (0.030)**	-0.0504 (0.179)	-0.0621 (0.021)**	-0.0598 (0.024)**	-0.0549 (0.044)**	-0.0560 (0.036)**
Relative Size	0.0000 (0.122)	0.0005 (0.501)	-0.0023 (0.000)***	0.0005 (0.507)	0.0005 (0.506)	0.0005 (0.488)	0.0005 (0.499)
Run-Up	0.0461 (0.032)**	0.0641 (0.258)	0.0892 (0.198)	0.0645 (0.256)	0.0639 (0.261)	0.0636 (0.263)	0.0629 (0.269)
Hostile	-0.0299 (0.783)						
Foreign Acquisition	-0.0192 (0.282)	-0.0437 (0.160)	-0.0023 (0.955)	-0.0430 (0.169)	-0.0438 (0.165)	-0.0451 (0.153)	-0.0449 (0.155)
Competition	-0.0189 (0.815)	0.2833 (0.132)	0.0886 (0.064)*	0.2838 (0.128)	0.2824 (0.129)	0.2800 (0.135)	0.2800 (0.134)
Public Target	-0.0115 (0.582)	-0.0340 (0.428)	-0.0628 (0.219)	-0.0338 (0.433)	-0.0339 (0.431)	-0.0335 (0.435)	-0.0332 (0.440)
Cash (Stock)	0.1675 (0.000)***	0.1248 (0.298)	0.2046 (0.145)	0.1260 (0.292)	0.1263 (0.290)	0.1270 (0.288)	0.1270 (0.288)
Unrelated Target	-0.0201 (0.200)	0.0276 (0.376)	0.0186 (0.628)	0.0268 (0.388)	0.0267 (0.389)	0.0260 (0.402)	0.0265 (0.393)
Time Interval	0.0002 (0.286)	0.0002 (0.337)	0.0000 (0.926)	0.0002 (0.344)	0.0002 (0.337)	0.0002 (0.318)	0.0002 (0.322)
Constant	-0.1969 (0.000)***	0.0673 (0.620)	-0.0701 (0.662)	0.0607 (0.656)	0.0555 (0.682)	0.0447 (0.743)	0.0468 (0.730)
N	3415	540	342	540	540	540	540
F-Stat	7.01 (0.000)***	1.71 (0.076)*	5.54 (0.000)***	1.65 (0.089)*	1.70 (0.078)*	1.85 (0.050)**	1.82 (0.054)*
R-Squared	0.03	0.04	0.04	0.04	0.04	0.04	0.04

Table 120: Five-Day Cross Sectional Analysis for Media (0,6)

This table reports the results of the cross-sectional analysis for the short-term. The short-term is modelled using five-day (-2,+2) cumulative abnormal returns (CARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The CARs are calculated using the formula $CAR_i = \sum_{i=0}^{n} AR_i$. The independent variables are as follows: *Tier One Media Exposure* is a binary variable that takes the value of 1 if the acquirer was covered in top UK media six months before announcement as defined in Section 5.2.1; *Media Coverage* is the number of articles covering the acquiring in top UK media six months before announcement as defined in Section 5.2; *Media Attitude* is the level of pessimism regarding the bidder around the event window, as defined in Section 5.2; *Positive (Negative) Words in Title* is the number of positive (negative) words in the titles of the articles covering the acquirer in top UK media six months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Positive (Negative) Words in Content* is the number of positive (negative) words in the content of the articles covering the acquirer in top UK media six months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Ln(Size)* is the logarithm of the acquirer's market value as measured one month before announcement; *Relative Size* is calculated as the deal value divided by the market value of the acquirer, as measured one month before announcement; *Run-Up* is the CAR of the acquirer over a (-300,-3) window; *Hostile* is a binary variable that takes the value of 1 if the acquirer uses hostile approach techniques; *Foreign Target* is a binary variable that takes the value of 1 if the target is located outside of the UK; *Competition* is a binary variable that takes the value of 1 if there was more than one offer for the target; *Public Target* is a binary variable that takes the value of 1 if the target is listed on a stock exchange; *Cash(Stock)* is a binary variable that takes the value of 1 if the deal is financed 100% using cash(stock); *Unrelated Target* is a binary variable that takes the value of 1 if the target is in a different to that of the acquirer as measured using the two-digit primary SIC code; *Time Interval* measures the number of days between the announcement and completion dates. The possible existence of homoscedasticity is controlled for, with the p-values reported in parentheses using robust standard errors. Statistical significance at the 1%, 5% and 10% levels are denoted ***, ** and * respectively.

	1	2	3	4	5	6	7
Tier One Media Exposure	0.0028 (0.309)						
Media Coverage		-0.0002 (0.899)					
Media Attitude			-0.0594 (0.830)				
Positive Words in Title				0.0002 (0.418)			
Negative Words in Title					0.0001 (0.527)		
Positive Words in Content						0.0000 (0.345)	
Negative Words in Content							0.0000 (0.249)
Ln (Size)	-0.0087 (0.000)***	-0.0148 (0.001)***	-0.0165 (0.000)***	-0.0163 (0.000)***	-0.0159 (0.000)***	-0.0166 (0.000)***	-0.0168 (0.000)***
Relative Size	0.0000 (0.116)	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***
Run-Up	0.0059 (0.240)	-0.0026 (0.777)	-0.0035 (0.712)	-0.0024 (0.787)	-0.0023 (0.801)	-0.0023 (0.797)	-0.0021 (0.814)
Hostile	-0.0224 (0.130)						
Foreign Acquisition	0.0041 (0.149)	-0.0032 (0.487)	-0.0027 (0.578)	-0.0030 (0.522)	-0.0029 (0.541)	-0.0029 (0.543)	-0.0028 (0.555)
Competition	-0.0141 (0.290)	0.0020 (0.952)	0.0029 (0.930)	0.0026 (0.936)	0.0026 (0.936)	0.0032 (0.923)	0.0035 (0.916)
Public Target	-0.0095 (0.012)**	-0.0106 (0.216)	-0.0115 (0.183)	-0.0108 (0.207)	-0.0107 (0.210)	-0.0109 (0.203)	-0.0111 (0.197)
Cash (Stock)	0.0046 (0.466)	0.0268 (0.169)	0.0283 (0.160)	0.0268 (0.170)	0.0268 (0.170)	0.0267 (0.171)	0.0267 (0.172)
Unrelated Target	-0.0011 (0.683)	0.0003 (0.953)	0.0004 (0.938)	0.0003 (0.943)	0.0003 (0.954)	0.0003 (0.941)	0.0003 (0.941)
Time Interval	0.0001 (0.026)**	0.0001 (0.004)****	0.0001 (0.002)***	0.0001 (0.005)***	0.0001 (0.005)***	0.0001 (0.005)***	0.0001 (0.006)***
Constant	0.0259 (0.001)***	0.0276 (0.176)	0.0309 (0.142)	0.0303 (0.141)	0.0297 (0.144)	0.0312 (0.129)	0.0317 (0.121)
N	3415	660	639	660	660	660	660
F-Stat	3.96 (0.000)***	9.79 (0.000)***	9.14 (0.000)***	9.55 (0.000)***	9.51 (0.000)***	9.14 (0.000)***	9.41 (0.000)***
R-Squared	0.01	0.05	0.05	0.05	0.05	0.05	0.05

Table 121: Twelve-Month Cross Sectional Analysis for Media (0,6)

This table reports the results of the cross-sectional analysis for the long-term. The long-term is modelled using long-term twelve month (0,+12) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The independent variables are as follows: *Tier One Media Exposure* is a binary variable that takes the value of 1 if the acquirer was covered in top UK media six months before announcement as defined in Section 5.2.1; *Media Coverage* is the number of articles covering the acquiring in top UK media six months before announcement as defined in Section 5.2; *Media Attitude* is the level of pessimism regarding the bidder around the event window, as defined in Section 5.2; *Positive (Negative) Words in Title* is the number of positive (negative) words in the titles of the articles covering the acquirer in top UK media six months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Positive (Negative) Words in Content* is the number of positive (negative) words in the content of the articles covering the acquirer in top UK media six months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Ln(Size)* is the logarithm of the acquirer's market value as measured one month before announcement; *Relative Size* is calculated as the deal value divided by the market value of the acquirer, as measured one month before announcement; *Run-Up* is the CAR of the acquirer over a (-300,-3) window; *Hostile* is a binary variable that takes the value of 1 if the acquirer uses hostile approach techniques; *Foreign Target* is a binary variable that takes the value of 1 if the target is located outside of the UK; *Competition* is a binary variable that takes the value of 1 if there was more than one offer for the target; *Public Target* is a binary variable that takes the value of 1 if the target is listed on a stock exchange; *Cash(Stock)* is a binary variable that takes the value of 1 if the deal is financed 100% using cash(stock); *Unrelated Target* is a binary variable that takes the value of 1 if the target is in a different to that of the acquirer as measured using the two-digit primary SIC code; *Time Interval* measures the number of days between the announcement and completion dates. The possible existence of homoscedasticity is controlled for, with the p-values reported in parentheses using robust standard errors. Statistical significance at the 1%, 5% and 10% levels are denoted ***, ** and * respectively.

	1	2	3	4	5	6	7
Tier One Media Exposure	0.0028 (0.309)						
Media Coverage		-0.0002 (0.899)					
Media Attitude			-0.0594 (0.830)				
Positive Words in Title				0.0002 (0.418)			
Negative Words in Title					0.0001 (0.527)		
Positive Words in Content						0.0000 (0.345)	
Negative Words in Content							0.0000 (0.249)
Ln (Size)	-0.0087 (0.000)***	-0.0148 (0.001)***	-0.0165 (0.000)***	-0.0163 (0.000)***	-0.0159 (0.000)***	-0.0166 (0.000)***	-0.0168 (0.000)***
Relative Size	0.0000 (0.116)	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***	0.0001 (0.000)***
Run-Up	0.0059 (0.240)	-0.0026 (0.777)	-0.0035 (0.712)	-0.0024 (0.787)	-0.0023 (0.801)	-0.0023 (0.797)	-0.0021 (0.814)
Hostile	-0.0224 (0.130)						
Foreign Acquisition	0.0041 (0.149)	-0.0032 (0.487)	-0.0027 (0.578)	-0.0030 (0.522)	-0.0029 (0.541)	-0.0029 (0.543)	-0.0028 (0.555)
Competition	-0.0141 (0.290)	0.0020 (0.952)	0.0029 (0.930)	0.0026 (0.936)	0.0026 (0.936)	0.0032 (0.923)	0.0035 (0.916)
Public Target	-0.0095 (0.012)**	-0.0106 (0.216)	-0.0115 (0.183)	-0.0108 (0.207)	-0.0107 (0.210)	-0.0109 (0.203)	-0.0111 (0.197)
Cash (Stock)	0.0046 (0.466)	0.0268 (0.169)	0.0283 (0.160)	0.0268 (0.170)	0.0268 (0.170)	0.0267 (0.171)	0.0267 (0.172)
Unrelated Target	-0.0011 (0.683)	0.0003 (0.953)	0.0004 (0.938)	0.0003 (0.943)	0.0003 (0.954)	0.0003 (0.941)	0.0003 (0.941)
Time Interval	0.0001 (0.026)**	0.0001 (0.004)***	0.0001 (0.002)***	0.0001 (0.005)***	0.0001 (0.005)***	0.0001 (0.005)***	0.0001 (0.006)***
Constant	0.0259 (0.001)***	0.0276 (0.176)	0.0309 (0.142)	0.0303 (0.141)	0.0297 (0.144)	0.0312 (0.129)	0.0317 (0.121)
N	3415	660	639	660	660	660	660
F-Stat	3.96 (0.000)***	9.79 (0.000)***	9.14 (0.000)***	9.55 (0.000)***	9.51 (0.000)***	9.14 (0.000)***	9.41 (0.000)***
R-Squared	0.01	0.05	0.05	0.05	0.05	0.05	0.05

Table 122: Twenty-Four Month Cross Sectional Analysis for Media (0,6)

This table reports the results of the cross-sectional analysis for the long-term. The long-term is modelled using long-term twenty-four month (0,+24) buy and hold abnormal returns (BHARs) for acquirers over the sample period 01/01/1990 until 31/12/2008. The BHARs are calculated using the formula $BHAR_{it} = \prod_{t=0}^{T}[1 + R_{it}] - \prod_{t=0}^{T}[1 + R_{mt}]$. The independent variables are as follows: *Tier One Media Exposure* is a binary variable that takes the value of 1 if the in top UK media six months before announcement as defined in Section 5.2.1; *Media Coverage* is the number of articles covering the acquiring in top UK media six months before announcement as defined in Section 5.2; *Media Attitude* is the level of pessimism regarding the bidder around the event window, as defined in Section 5.2; *Positive (Negative) Words in Title* is the number of positive (negative) words in the titles of the articles covering the acquirer in top UK media six months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Positive (Negative) Words in Content* is the number of positive (negative) words in the content of the articles covering the acquirer in top UK media six months before announcement as defined using the Loughran and McDonald (2010) Financial Dictionary; *Ln(Size)* is the logarithm of the acquirer's market value as measured one month before announcement; *Relative Size* is calculated as the deal value divided by the market value of the acquirer, as measured one month before announcement; *Run-Up* is the CAR of the acquirer over a (-300,-3) window; *Hostile* is a binary variable that takes the value of 1 if the acquirer uses hostile approach techniques; *Foreign Target* is a binary variable that takes the value of 1 if the target is located outside of the UK; *Competition* is a binary variable that takes the value of 1 if there was more than one offer for the target; *Public Target* is a binary variable that takes the value of 1 if the target is listed on a stock exchange; *Cash(Stock)* is a binary variable that takes the value of 1 if the deal is financed 100% using cash(stock); *Unrelated Target* is a binary variable that takes the value of 1 if the target is in a different to that of the acquirer as measured using the two-digit primary SIC code; *Time Interval* measures the number of days between the announcement and completion dates. The possible existence of homoscedasticity is controlled for, with the p-values reported in parentheses using robust standard errors. Statistical significance at the 1%, 5% and 10% levels are denoted ***, ** and * respectively.

	1	2	3	4	5	6	7
Tier One Media Exposure	0.1433 (0.000)***						
Media Coverage		0.0299 (0.039)**					
Media Attitude			2.7898 (0.273)				
Positive Words in Title				0.0017 (0.545)			
Negative Words in Title					0.0014 (0.243)		
Positive Words in Content						0.0001 (0.386)	
Negative Words in Content							0.0000 (0.340)
Ln (Size)	0.0017 (0.907)	-0.1590 (0.002)***	-0.1151 (0.005)***	-0.1141 (0.009)***	-0.1237 (0.005)***	-0.1187 (0.008)***	-0.1194 (0.007)***
Relative Size	0.0000 (0.000)***	-0.0003 (0.576)	-0.0003 (0.403)	-0.0003 (0.468)	-0.0003 (0.447)	-0.0003 (0.456)	-0.0003 (0.454)
Run-Up	0.0404 (0.207)	0.0585 (0.424)	0.0746 (0.320)	0.0498 (0.496)	0.0544 (0.459)	0.0509 (0.487)	0.0520 (0.478)
Hostile	0.0731 (0.675)						
Foreign Acquisition	-0.0517 (0.034)**	-0.1010 (0.031)**	-0.0857 (0.072)*	-0.1044 (0.026)**	-0.0998 (0.034)**	-0.1031 (0.028)**	-0.1027 (0.028)**
Competition	0.0075 (0.955)	0.5182 (0.000)***	0.5389 (0.000)***	0.5377 (0.000)***	0.5485 (0.000)***	0.5434 (0.000)***	0.5450 (0.000)***
Public Target	-0.0011 (0.971)	-0.0826 (0.255)	-0.0908 (0.205)	-0.0752 (0.294)	-0.0757 (0.290)	-0.0763 (0.286)	-0.0771 (0.281)
Cash (Stock)	0.2855 (0.000)***	0.3562 (0.086)*	0.3233 (0.142)	0.3461 (0.103)	0.3458 (0.104)	0.3455 (0.104)	0.3453 (0.104)
Unrelated Target	-0.0760 (0.001)***	0.0264 (0.549)	0.0425 (0.340)	0.0279 (0.528)	0.0276 (0.531)	0.0281 (0.524)	0.0281 (0.523)
Time Interval	0.0001 (0.306)	0.0008 (0.043)**	0.0009 (0.025)**	0.0008 (0.039)**	0.0007 (0.050)**	0.0008 (0.042)**	0.0008 (0.043)**
Constant	-0.3863 (0.000)***	-0.0064 (0.977)	-0.0076 (0.974)	-0.0103 (0.964)	0.0111 (0.961)	0.0004 (0.999)	0.0024 (0.991)
N	3329	632	614	632	632	632	632
F-Stat	11.90 (0.000)***	4.85 (0.000)***	5.31 (0.000)***	5.05 (0.000)***	4.97 (0.000)***	4.94 (0.000)***	4.95 (0.000)***
R-Squared	0.04	0.05	0.05	0.04	0.05	0.04	0.05

Chapter Six:
Conclusion

6. Conclusion

"What are the main conclusions to be drawn from this collection? I would suggest two. First, it is possible to do good economic research even if the assumption of universal rationality is relaxed. Second, we can understand much more about the behaviour of markets, even financial markets, if we learn more about the behaviour of the people who operate in these markets."

Richard H. Thaler (1993: xxi)

This thesis provides further evidence in relation to the value and worth of behavioural psychology in explaining acquirer abnormal returns. Modern financial markets are at the hands of behavioural heuristics that have been shown to influence decision-making processes resulting in the notion that it is people that are driving markets. A plethora of academic research has examined the general application of psychological findings to economics and finance (Thaler, 1993; Subrahmanyam, 2008). There remains however great opportunity for further application of these heuristics to the field of Mergers and Acquisitions. This thesis contributes to this end, exploring the value of market-timing, capital structure changes, and media coverage in explaining acquiring firm's abnormal returns.

Neoclassical economics was built on the idea that individuals are rational decision-makers (Smith, 1774). Efficient markets proposed that markets move randomly due to the unpredictable arrival of new information (Fama, 1965/1970). Stock prices therefore follow a random evolution with no profitable opportunities existing due to either past, present or private information. If profitable opportunities do emerge, the presence of arbitrageurs quickly eradicates temporary inefficiencies pushing prices back towards their fundamental levels. Thus a combination of passive and active trading was proposed as maintain economic efficiency at an aggregate level.

Despite the logic of this early research, subsequent investigations began to break-down the supremacy of efficient markets. Anomalies such as firm size, weekends, religious holidays, lunar moon cycles, momentum, overreaction, underreaction and many more indicated the presence of less than rational economic activity. Moreover, the acceptance of the presence of information asymmetry meant that it was acknowledged that individuals rely on their own subjective assessments which can be infected by emotion or *animal spirits* (Keynes, 1936).

When applied to corporate finance, these heuristics can influence both managerial teams and investors alike. Various theories have emerged exploring the existence of rationality at managerial and investor levels. Shleifer and Vishny (2003) present a model whereby a rational manager exploits the irrational market through timing the execution of stock-financed acquisitions. Rhodes-Kropf and Viswanathan (2004) argue that managers can be irrational in their abilities to decompose market-wide relative to firm-specific misvaluation, resulting in overpayment. Roll (1986) proposes that irrational managers can be infected by *hubris*, an overly optimistic attitude that can result in the miscalculation of synergies causing long-term losses for acquirers. Malmendier and Tate (2009) corroborate with evidence that superstar CEOs – those recognised with prestigious business awards – significantly underperform their peers. The value of applying psychological heuristics to Mergers and Acquisitions can be seen to be well-warranted in the light of these findings.

While market-timing and market misvaluation have been shown to be key determinants of acquirer performance in the US, little evidence exists elsewhere. Chapter Three of this thesis examines the interaction between firm and market misvaluation using an intuitive comparative assessment approach between successfully completed deals versus those which fail for exogenous reasons, following the approach of Savor and Lu (2009).

How to truly measure acquirer performance is something that has plagued corporate finance research. Fama (1998) warned that academic findings should be treated with caution as it is difficult to ascertain whether empirical results are true or whether they are a manifestation of poor methodology. To try to counter this problem, Chapter Three stratifies UK mergers and acquisitions according to whether the deal succeeded or failed. Savor and Lu (2009) inspire this approach whereby they propose that if mergers are in the best interests of the shareholders the firm serves, then deals that successfully complete should outperform those that do not. Moreover, if this holds when equity is used as payment, then support for market-timing is shown as the merger cushions the long-term stock price collapse. Importantly, to make this observation, one must control for the reason that the deal fails. Chapter Three does so using the news database LexisNexis UK, sub-stratifying the failed sample according to whether the deal fails for reasons internal to the acquirer or whether it fails because of reasons outside of the acquirers control.

Chapter Three finds that over the short-term, significant value is created by acquirers. Successfully completed deals significantly outperform those that fail by 1.70% (0.001) at announcement and 1.17% (0.082) at deal outcome. However, this outperformance does not prevail for equity-financed transactions where there is no statistical difference in the performance between the two samples. When examining firm misvaluation, successfully completed deals do not perform any differently to those which fail if the firm is overvalued. However, there are significant gains for those firms that are undervalued, with an outperformance of successful undervalued acquirers relative to those which fail up to 2.76% (0.001) at announcement. Finally, the valuation of the market is shown to result in significantly better returns for successful bidders relative to those which fail of 2.82% (0.057) at announcement, despite acquirers on average earning 1.05% (0.000) at announcement in high-valuation markets relative to low-valuation ones.

Empirical examinations over the long-term however indicate quite the reverse. Significant wealth is destroyed by acquirers that successfully complete their deals relative to those that do not. Successful acquirers earn 27.67% (0.005) lower returns from announcement, and 21.15% (0.030) lower returns from completion. Moreover, overvalued acquirers significantly underperform by 19.66% (0.090). While undervalued acquirers on average also experience long-term losses, they are 17.89% (0.000) lower than the losses experienced by overvalued acquirers and so undervaluation proves to be a better incentive for acquiring than overvaluation.

Chapter Three contributes to the existing literature by proving that established US findings do not hold elsewhere when considered internationally. The stock market does not appear to drive UK acquisitions as it does in the US and so there remains further opportunity for trying to explain why the UK remains the second most active M&A market worldwide.

An anomaly of the UK market finds that around 80.2% of transactions are paid for solely with cash (Faccio and Masulis, 2005; Doukas and Petmezas, 2007), yet there is no study to date that has examined capital structure changes and resultant acquirer abnormal returns. Chapter Four fills this void by examining acquirer abnormal returns for firms that issue equity or debt in the three-year preceding the merger announcement relative to those that do not.

Capital structure and firm value has centred around three seminal models – the trade-off model of Modigliani and Miller (1958/1963), the pecking-order model of Myers (1984) and the market-timing model of Baker and Wurgler (2002). These models attempt to explain the level of debt relative to equity in a firm's capital structure, exploring the value of information asymmetry, market valuation and tax-deductibility of debt interest payments in doing so.

In addition to these overriding models, agency theory also provides a motive for the issuance of debt. Jensen and Meckling (1976) propose that inclusion of debt in a firm's capital structure can help monitor and discipline a manager who could fear their job security. Empirical research has shown that external stakeholders can effectively monitor managerial actions and pecuniary consumption via the adoption of measures such as auditing, budget controls and effective incentive compensation systems that can converge the interests of the conflicting parties. A firm that has debt obligations must make those payments as otherwise the firm faces bankruptcy. Thus managers can be motivated to indulge less in activities that maximise their own utility but not that of the shareholders they represent through the fear of losing their job (Jensen, 1986; Jensen and Murphy, 1990).

Chapter Four of this thesis finds that while the issuance of equity does not exert any significant effect on an acquirer's performance short-term, over the long-term, acquirers that issue equity earn 10.77% (0.012) lower returns from announcement. Given the statistical and economic significance of the underperformance of acquirers that issue equity before their merger relative to those that do not, it is recommended that firms should not seek to raise capital via equity in the three-years prior to a merger announcement. On the other hand, those acquirers that issue debt earn significantly better returns for their shareholders than those that do not, particularly over the long-term. On average, acquirers that have issued debt in the three-years before their merger announcement earn 19.65% (0.000) higher returns than those that have not. In actuality, this is still not a long-term positive gain for shareholders, but indeed there is a statistically lower loss of a sizeable economic magnitude.

The findings of Chapter Four provide explicit support for the motivation to explore deeper the pre-financing activity of an acquirer. The present results provide support for the issuance of debt as a corporate control mechanism, contributing to the existing literature by indicating that firms should utilise debt capacity more than they should attempt to time capital markets. Investment gurus including Warren Buffett and Peter Lynch continue to promote value investing, and it would appear the acquirers serve shareholders best by buying good assets cheaply, financing using debt to do so.

In 2007, global financial markets were shook by the sub-prime credit crunch of the US. The growing financial market integration since the seventies resulted in the collapse of the US filtering into major capital economies across the world through the integration of bank balance sheets. Easy access to debt in capital markets from 2003 up to 2007 led to high private debt levels in US households that were unsustainable given household incomes. When individuals began to default, huge black holes emerged in Wall Street causing the collapse of major institutions such as Lehman Brothers. As the US market crashed, this spread worldwide and soon economies that had borrowed heavily in the public sector, such as Greece and Portugal, began to collapse as banks recalled loans.

What accompanied the global credit crisis was mass exposure and proliferation of the failings of the free market by the media of what had gone wrong. It has become quickly apparent that the free media holds an exceptional power over public perception. Reinforcement of market declines and stock market collapse has caused uncertainty for individuals fearful of the security of their investments. Firms are holding historically high corporate cash balances as managers have sought to avoid making acquisitions that could eat up cash or indeed expose them to the scrutiny of the media.

Chapter Five examines the power of the press in a merger and acquisition setting. The reliability of the printed word from prestigious news brands such as The Guardian and The Independent undoubtedly can help shape an investors understanding of a firm's value. Bob Swarup (2013) supports the importance of the media in shaping stock prices, asking "*if I was to give you the whole balance sheet of Apple, for example, with all of its millions of nuggets of normally useful information, but without any of the price information, could you tell me what the share price of Apple is?"* Quite frankly, it would be near-on impossible because in today's world, what determines a stock price goes beyond the fundamentals of the firm's operations.

To examine the impact of the media upon an acquirer's merger performance, it is necessary to first determine the level of media coverage surrounding the acquirer as well as the attitude of that media. Media articles for listed UK firms are downloaded from the news database LexisNexis UK. The database ranks sources according to the supply and sales of UK publications. The chapter uses Major UK Publications as defined by LexisNexis in this way. This media information is then matched to a M&A sample downloaded from Thomson One Banker, for periods (one month, six months and twelve months) before the transaction is announced. The level of pessimism of this media is then calculated using the methodology of Garcia (2013) to develop a pessimism factor.

Fang and Peress (2009) find evidence of a no media premium that is higher returns are found for firms that are not covered in the media. While it is impossible to source all media sources and indeed to concretely say that a firm has not had any media coverage, the results do imply that firms not covered in the press earn higher returns than those that are covered in the press. The existing literature provides various reasons for this. Firstly, there is the view that this reflects a liquidity-phenomenon, such that inefficiencies prevailing through impediments to trade being present. An alternative view is that stocks not in the media offer higher rates of return because there is less information in the public sphere about them and thus they reflect a higher level of risk invoking higher levels of compensation for investors. Secondly, the no media premium could also be as a result of investor recognition (Merton, 1987; Barber and Odean, 2008). This idea is that investors, charged with the task of choosing which stocks to buy from the investable universe, choose those which catch their attention. In this setting, the mass media, when covering a stock, directly places it into the eyes of investors wishing to spend capital and thus increased awareness causes a differential performance between stocks in the media relative to those not in the media.

Chapter Five finds that acquirers covered by tier one media earn statistically significantly lower announcement returns that those not covered in tier one media. Over the long-term this reverses with acquirers in the media earnings significantly better returns (via lower losses) relative to those not in the media. The results support the theories of Fang and Peress (2009) as well as those of Merton (1987) and, Barber and Odean (2008) with small acquirers in the media outperforming large ones. The conclusion is that *"the media effect is rooted in a Merton-type information story, and liquidity constraints help perpetuate the phenomenon"* (Fang and Peress, 2009: 2024).

The evidence that the media does play a significant role in determining the abnormal returns of acquirers contributes to the existing literature by providing further evidence that mass media is indeed influencing investors. This chapter is the first to apply media coverage and media attitude to explaining acquirer abnormal returns, reporting significant relations between the two. While it is recognized that information dissemination for the firm via the mass media is crucial in determining the respective cost of capital and stock returns, existing empirical explorations have not assessed the role and effects of mass media as a distributor of information in a M&A setting. The results indicate that acquiring firm managers would best serve shareholders over the long run by undertaking a consistent PR pre-announcement campaign to place their firm in investors' minds.

The findings of this thesis provoke much inspiration for further research. The interaction between the empirical chapters of this thesis could provide additional value in helping to understand and explain merger activity. A key opportunity presents itself in the interaction between the issuance decision and merger activity, controlling for firm valuation and market valuation. The time interval between issuing debt or equity with the announcement of the merger itself could help explain whether mergers happen as a result of excess cash flow or indeed whether firms raise capital as a result of the existence of an available investment.

The role of the media could also be interacted throughout this process. To truly understand if firms are timing the market, then it could be that the media is driving acquisitions rather than the stock market. If the media does indeed shape and develop investor sentiment, then similar to the stock-market driven acquisitions of Shleifer and Vishny (2003), I would propose that media-driven acquisitions could indeed prove to be just as valuable for future research.

There are a number of limitations encountered in the completion of this thesis that should be addressed before final conclusion. Firstly, the evidence within this thesis relates to the UK market and thus for true validity, the results should be expanded into an international sample. Secondly, there are a number of further research opportunities to explore in relation to the issuance decision and decision to acquire. There could be a causation effect if the firms announce that they are raising funds specifically to acquire that could result in an earlier market reaction. This can be explored in further research. Finally, the level of corporate governance at acquiring companies could have an impact on the decision-making process. Future research will examine each chapter including corporate governance proxies into the analysis.

This thesis has robustly supported the value and worth of applying behavioural finance to mergers and acquisitions. If markets are nothing more than a reflection of people's emotions, then the investment decisions within them reflect their hopes, dreams and fears (Swarup, 2013). This thesis reflects a small step forward in helping policy makers, academics and industry professionals to understand the emotions and consequences of corporate investments, and hopefully provides compelling inspiration for continued research in this field.

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